Understanding Stakeholder Perspectives in the Evolving Figured World of a Widening Participation Initiative

Reshma Agrawal

Submitted in partial fulfilment of the requirements of the Degree of Doctor of Philosophy at Queen Mary University of London

February 2020

Statement of originality

I, Reshma Agrawal, confirm that the research included within this thesis is my own work or that where it has been carried out in collaboration with, or supported by others, that this is duly acknowledged below and my contribution indicated. Previously published material is also acknowledged below.

I attest that I have exercised reasonable care to ensure that the work is original, and does not to the best of my knowledge break any UK law, infringe any third party's copyright or other Intellectual Property Right, or contain any confidential material.

I accept that the College has the right to use plagiarism detection software to check the electronic version of the thesis.

I confirm that this thesis has not been previously submitted for the award of a degree by this or any other university.

Signature:

Date: 14 February 2020

Details of collaboration and publications: None

Abstract

Widening Participation (WP), *i.e.*, interventions which increase disadvantaged individuals' access to higher education (HE), has been on the political agenda for decades. Yet, numbers of disadvantaged individuals in selective higher education institutions (HEIs) and for selective courses (*e.g.*, dentistry) remain low. Many WP studies are atheoretical and theory-driven WP literature mainly focuses on (lack of) various types of capital, which WP initiatives seek to develop. Studies examining targeting of individuals for WP focus on policymakers and WP practitioners at HEIs, but there is very little research on enactment of targeting in schools.

This qualitative study explored the evolving perceptions of individuals involved in a new WP initiative (for dentistry and medicine) designed by a highly selective HEI. The purpose was to understand what strategies supported successful pupil engagement and evolution of the initiative and to advance theoretical knowledge of the wider field of WP through analysis of multiple perspectives (dental students, school pupils, school staff and HEI WP practitioners). Data collection included semi-structured interviews, focus groups, documentary artefacts and field note observations. Analysis used the lens of Figured Worlds (FW) – novel in WP research.

Findings illuminated ways that different stakeholders enacted targeting of pupils for the WP initiative through principles, pragmatics and prediction. Stakeholders collectively evolved the activities in this initiative through improvisations linked to contextual factors. This ensured its continuation and shaped pupil identities as potential undergraduates.

FW studies often use its constituent theoretical concepts selectively. This study benefitted from applying the full range of FW concepts. It provided unique insights into multiple perspectives shaping the evolving WP initiative.

The conceptual model of drivers influencing targeting should be tested in other WP contexts. Future WP initiative designs should consider the complex partnerships between schools and HEIs. Development of FW research should consider deeper theorisation in relation to agency.

Table of contents

Acknowledgements

There are many people whose support has been crucial in my research journey. First and foremost, I am forever indebted to my supervisors, Professor Della Freeth and Professor Kim Piper. There are not enough words to express my gratitude to you. To Kim – for inspiring me to push my boundaries and for being my mentor in every sense of the word. As my doctoral supervisor and my clinical supervisor, your support meant that I was able to live my life beyond work. To Della – for introducing me to the world of qualitative research and for gently leading me as I grappled with ontology and epistemology and theories. I am grateful to Dr Amitha Ranautha, who, as a third supervisor, provided me with pastoral support just when I needed it.

I am thankful to my family and friends. To my parents, Vinita and Anil – the Figured World you created for me enabled me to achieve what I wanted to. To my husband, Ankur, for reminding me that I could be better. To my wonderful children – Anoushka and Raghav – you kept me grounded in reality. Thank you all for your undying faith in me. To all my other friends and family, for offering me your shoulder, or ear, when I needed one most.

To my colleagues at work, without whose support I could not have done the endless hours of thesis writing and analysis. I am grateful also to all the colleagues, new and old, that I met during this research journey and that shaped my research.

Finally, this thesis could not have been possible without all the research participants – the enthusiastic school staff, the lovely school pupils, the helpful dental students and the supportive WP staff at the HEI. Thank you for sharing your insights with me and for allowing me to tell your stories. This thesis can only contribute to Widening Participation because of what you shared with me.

List of tables

List of figures

Abbreviations

A2D	Access to Dentistry
AA	Alcoholics Anonymous
BBC	British Broadcasting Service
BIS	Business Innovations & Skills
CPR	Cardiopulmonary Resuscitation
DfES	Department for Education and Skills
EMA	Education Maintenance Allowance
FE	Further Education
FSM	Free School Meal
FW	Figured World(s)
G&T	Gifted and Talented
HE	Higher Education
HEE	Health Education England
HEFCE	Higher Education Funding Council of England
HEI(s)	Higher Education Institution(s)
IAG	Information, Advice and Guidance
LEA	Local Education Authority
LPNs	Low Participation Neighbourhoods
MSC	Medical Schools Council
NCIHE	National Committee of Inquiry into Higher Education
NSP	National Scholarship Programme
NSS	National Student Survey
OFFA	Office For Fair Access
OfS	Office for Students
Ofsted	Office for Standards in Education, Children's Services and Skills
PDA	Personal Digital Assistant
PT	Project core Team
QA	Quality Assurance
SES	Socioeconomic status

SJT	Situational Judgement Test
SLA	Service Level Agreement
SNC	Student Number Control
STEM	Science, Technology, Engineering and Mathematics
TOC	Table of Contents
UCAS	Universities and Colleges Admissions Service
WP	Widening Participation

Chapter 1. Introduction

Widening Participation (WP) in education has been on the political agenda in the United Kingdom (UK) since the end of World War II. In broadest terms, WP refers to interventions that increase access to higher education (HE), in other words, that remove barriers which might otherwise prevent disadvantaged individuals from accessing HE (OFFA 2017). In the decades preceding the Dearing Report (NCIHE (The Dearing Committee) 1997), WP related to increasing access to HE for mature and adult learners. Following the publication of the Dearing Report, the focus of WP changed from mature individuals to young learners from disadvantaged backgrounds (Harrison 2012b). However, despite efforts to widen participation of individuals from disadvantaged backgrounds in HE, their numbers in the most selective institutions and for the most selective courses (such as dentistry or medicine) remain low.

There have been numerous studies examining the effect of social class on HE decision making (Ball 2010; Harwood *et al.* 2015; Whitty *et al.* 2015). Within the health sciences, qualitative research examining the perceptions of school-age pupils and their choices after compulsory education is mainly related to medicine and nursing (Alexander *et al.* 2019). Previous research has shown that the reasons for lack of participation in HE are related to low parental aspiration (which is sometimes a result of lack of parental HE) (Wilks and Wilson 2012), poor career counselling in schools (Moote and Archer 2017) or limited financial knowledge including fear of taking out loans (Pennell and West 2005). Other research examining attitudes of young people towards HE questions the lack of aspiration, focusing instead on the structural barriers (Chowdry *et al.* 2010; Mocca *et al.* 2019). Research on WP initiatives has focused on policymakers (Harrison *et al.* 2015) or the outcomes of WP activities (Smith *et al.* 2013). Studies examining targeting of individuals for WP focus on policymakers and WP practitioners at higher education institutions (HEIs), but there is very little research on how targeting is enacted in schools. Furthermore, the in-depth exploration of perceptions of stakeholders in WP initiatives is an under-researched area. This thesis therefore contributes to the literature on WP by addressing the gap in knowledge about targeting and the gap in knowledge about the interpretation and enactment of activities in WP initiatives by key stakeholders.

The thesis explored the evolving perceptions of individuals who were involved in what was then a new (and rapidly evolving) WP initiative, Access to Dentistry (abbreviated to A2D) (name and abbreviation both pseudonyms). This WP initiative was set up by the dental faculty and WP team of a highly selective HEI. A2D is a long-term project that centres on support for selected mentee pupils at a range of secondary schools in socioeconomically deprived areas of London through the development of long-term relationships with dental students and staff at the HEI, to help raise aspirations and awareness of dentistry[1] as a career choice.

The purpose of this research study was to develop an in-depth understanding of a particular WP initiative – A2D – in order to understand what strategies were employed by the WP initiative that would support successful pupil engagement and evolution of the initiative and to advance theoretical knowledge of the wider field of WP. This was an exploratory study. It is hoped that an understanding of stakeholders' perspectives might provide insights that could further improve this particular programme and inform other, similar WP activities.

The thesis drew on qualitative research methods that enabled in-depth analysis of participants' perceptions. The data for this study comprised interviews with stakeholders, fieldnotes and other documentary artefacts such as minutes of meetings, training and information resources. Cyclical data analysis was carried out to guide subsequent data collection and to direct the literature review. The study had a longitudinal element in so far as those who remained involved in A2D over the data collection period would contribute annual interviews, thus allowing examination of evolving perspectives.

The thesis is organised as follows:

Chapter 2 provides the background to the research, enabling the reader to understand the political and historical context for WP, mainly as it relates to the United Kingdom. The barriers to, and reasons for and against, WP are identified, followed by a critical exploration of targeting and of strategies employed to widen participation. The paucity

[1] Although A2D started as a WP initiative into dentistry, it evolved to include medicine (see section 5.1, page 92).

of in-depth studies of WP initiatives framed by a theoretical perspective is highlighted, thereby identifying gaps in the literature and leading to the research questions guiding the thesis.

Chapter 3 discusses the methodological grounding of this thesis, which is underpinned by social constructionism. The application of the case study methodology to this research study is discussed. The chapter then introduces the reader to the theoretical perspective guiding the findings and subsequent analysis of the data – that of Figured Worlds.

Chapter 4 is a systematic literature review critically examining other research studies that have employed the Figured World lens. A judgement as to the value of this complex and deeply insightful theory is then provided so as to identify a further gap in the literature that could be filled through the findings of this thesis.

Chapter 5 outlines the study design, providing the context in which the research was conducted. The data gathering and analytical process, which are closely aligned to the methodological basis of the thesis, are discussed next. A detailed exploration of the researcher position enables the reader to understand the factors influencing the research design, process, analysis and interpretation.

Chapters 6-8 explore the findings and attend to the research question. The focus in these chapters is on the multiple perspectives that were shaped by, and that shaped, the evolution of the WP initiative. The case study methodology and the Figured Worlds lens enabled this focus on multiple perspectives. Chapter 6 illustrates the concepts of the Figured Worlds theory through carefully selected, pertinent data. Chapter 7 explores the participant perspectives that shaped the evolution of targeting in A2D. Chapter 8 provides insights into the evolution of the principal activities of A2D.

Chapter 9 rounds off the findings by providing a theoretically grounded discussion of the main insights into targeting and the activities in A2D, insights from the application of the Figured Worlds theory to this research, reflections on the quality, limitations and strengths of the study and recommendations for future research. Conclusions from the findings bring the thesis to a close.

Chapter 2. Literature Review I: A review of Widening Participation

2.1. Introduction and outline of chapter

This chapter outlines the political and social context of Widening Participation, which provided the backdrop against which Access to Dentistry (A2D) – the WP initiative at the heart of the research study – was designed and delivered. The chapter begins with a brief explanation of the process of the literature review (section 2.2). An exploration of the reasons for (section 2.3) and against (section 2.4) WP is followed by an examination of the political context of WP in the UK (section 2.5). The subsequent section reviews the literature on WP in terms of perceived barriers to participation in HE (section 2.6). This is followed by a discussion of the strategies for WP (section 2.7). Next, the literature examining WP in medicine and dentistry is reviewed in section 2.8. Guided in part by the issues arising in early cycles of data analysis, a review of targeting for WP (section 2.9) highlights the lack of adequate and research-driven strategies to identify the most suitable individuals for WP activities. Finally, the main themes arising out of the existing research on WP are summarised (section 2.10), with the aim of identifying gaps in the literature, particularly in relation to the purpose of this research study – to develop an in-depth understanding of a particular WP initiative, so as to inform other WP initiatives and contribute to gaps in current knowledge.

2.2. How the literature review was conducted

The literature review was initiated by obtaining key policy documents and government reports related to WP in November 2012 (*e.g.*, Action on Access 2008; BIS 2011a). This enabled identification of further relevant research through a citation search and identification of the main publications discussing WP in HE. At this stage, key terms related to WP were also identified and listed. Search terms used initially were variations and combinations of 'widening participation', 'widening access', 'outreach', 'higher education'. Existing reviews of WP were consulted for refinement of search terms and

combinations, and a combined list of terms and searches was created. These terms were then incorporated in searches of databases and citation indices; the first search was carried out in February 2013. Databases included PubMed, Web of Science, Social Science Citation Index, ERIC and Google Scholar, which were listed in my institutional library. Inclusion criteria were necessarily broad, and studies included comprised:

- All publications (including empirical research, literature reviews, reports, essays and opinion pieces)
- No date limits at the outset
- Publications limited to the English language literature
- Publications focused on the UK context, but not excluding the international literature

Research into mature students, disabled students, international students and adult education was excluded on the basis that their participation in HE raises different, albeit equally important, issues. Publications in languages other than English amounted to a very small number indexed in the databases searched.

Such broad inclusion of the literature was deemed necessary so that an understanding could be gained in terms of the depth and the breadth of existing knowledge of WP. Further, the literature on WP comprises, in addition to empirical research, a large body of discursive texts that deliberate the various facets of WP. This literature informed the themes selected for exploration in sections 2.3 to 2.10 and the empirical and discursive literature was integrated to review emerging themes. Some, but not all, themes emerged at this stage, and the next paragraph describes the expansion of the themes reviewed. Building on existing reviews of WP at the start of the doctoral study (*e.g.*, Gorard *et al.* 2006; Thomas 2011) an attempt was made to judge the empirical and discursive studies on the quality of research methods reported, the nature and quality of the findings and the relevance of the findings. However, it was not always possible to assess the quality of the evidence. In view of the nature of the literature and the difficulty in assessing quality, a decision was made not to exclude research on grounds of quality (similar to, for example, Stanley and Goodlad 2010).

Citation alerts for the most relevant studies and Table of Content (TOC) alerts for the main publications were set up in order to identify emergent research. Further search terms (*e.g.*, 'targeting', 'peer mentoring', 'electronic mentoring') and new publications were iteratively added to the literature review. Other themes and key terms related to WP were identified through the literature review. The initial literature review revealed how WP was synthesised and interpreted; the literature frequently mentioned barriers to accessing HE, which included terms such debt, lack of appropriate advice, distance to HE. These barriers were framed by concepts such as 'social capital', 'cultural capital', 'habitus', or 'identity'. This led to further literature reviews and manual searching of references to identify studies that included these terms. These concepts were then explored in sections 2.6 to 2.9. Table 1 below is a brief outline of the search terms incorporated during the literature review:

Table 1: Search terms used for literature review of WP

First search	Widen* participation; widen* access; outreach; higher education; HE; further education; FE; college; university; undergraduate
Further search terms added in subsequent searches	Targeting; peer mentoring; habitus; capital; cultural capital; social capital; free school meal*; FSM; parental education; low income; debt; geograph*; field; identity; aspiration; attainment; recruit*; admission; campus visit*; school visit*; electronic mentoring; e-mentoring; online mentoring

As the thesis developed and themes emerged from analysis of the findings, it became apparent that theories that were used for researching WP were often based on a deficit-approach, could not explain all the themes identified in my data, particularly the concept of 'identity' and could not explain the mechanism by which the WP initiative in this study was operating. A search for appropriate theoretical perspectives that examined 'identity' led me to the concept of Figured Worlds. A review of the literature focusing on Figured Worlds is described in detail in Chapter 4, section 4.3 on page 80. A final search was conducted in February 2020 to include relevant literature not previously

captured and, this, together with the latest TOC alerts in January and February 2020, yielded 18 results.

2.3. Why widen participation? The advantages of HE

The concept of disadvantage has different connotations, such as race, gender, socioeconomic status; these indicators of disadvantage are complex and may sometimes be interrelated. WP is, therefore, perceived and enacted in different ways across different geographical, political and sociocultural contexts. To a certain extent, WP in the UK is similar to that in other high-income countries such as Australia, whereas the challenges faced in low-income nations are different (for example, Ilie and Rose 2016). As such, this thesis focuses mainly on the literature within the UK, with references, where appropriate, to international research.

The benefits of HE may be apparent to the individual, to the general economy and to society. A fairer education system can enable individuals to achieve their full academic potential and, ultimately, benefit the national economy (The Sutton Trust 2004), while fulfilling the social justice agenda (Independent Reviewer of Social Mobility and Child Poverty 2012; Gartland 2013; McCowan 2016). For an individual, a university degree confers not only social advantage, but is more likely to lead to better and higher-paying jobs, considerable health benefits and more active community engagement, with reduced incidence of crime (Independent Reviewer of Social Mobility and Child Poverty 2012; Coughlan 2013; McCowan). With an increasingly diverse pool of students in post-compulsory education (for example, ranging from the 'traditional' 18-year-old school leavers going to live at university, to mature and part-time students), access to HE can cultivate qualities such as confidence and social engagement. Graduates are more likely to be more interested in their children's education, thus perpetuating the cycle of a better educated, and therefore economically mobile, society (Independent Review of Higher Education Funding and Student Finance 2010; Wakeling and Savage 2015). More individuals with a university degree would have greater access to the competitive global labour market (Independent Reviewer of Social Mobility and Child Poverty), thereby addressing the needs of a knowledge-based economy (Gale *et al.* 2010). HE can be seen as a route to providing social mobility (Gartland) and social equality (Loveday 2015).

While the political origins of WP may be rooted in neoliberal ideologies of equal opportunity, social justice and economic benefits, the policy implementation appears to struggle to achieve the goal. Notwithstanding a near-consistent increase in overall enrolment rates in HE from 2006 to 2015 (Curnock-Cook 2012; Department for Education 2016) and despite spending a considerable sum of money on outreach and access work, progress in *widening access*[2] to and *widening participation*[3] of the most disadvantaged applicants has been slow (OFFA/HEFCE 2013). There is agreement amongst HEIs, schools and the government that there is a need for a concerted, national effort to address these (and other) barriers and thereby widen participation (Richardson 2013). There is increasing pressure on HEIs, particularly the most selective ones, to make a concerted effort towards widening participation and increasing social mobility.

2.4. Why not widen participation? The great divide – excellence 'versus' diversity

Despite several policy documents and government initiatives to widen access (see sections 2.5 and 2.7), WP continues to be a controversial and polarising issue. Some may question whether there is a need for so many graduates in society, whether there are adequate employment opportunities that will utilise the skills they gain through HE (Brennan 2012) or indeed whether the skills acquired through HE are aligned with potential employers' demands (Tholen *et al.* 2016; Harrison 2019). It is worth noting that discussions concerning alignment or coupling between HE and employment are less relevant for courses such as medicine, dentistry or pharmacy, where the knowledge gained through HE is directly linked to future professional pathways. For many other HE providers and courses, there are calls to re-evaluate their function in relation to the changing labour market and changing employer demands (Tholen *et al.* 2016).

[2] Widening Access refers to increasing the recruitment and admission of individuals traditionally underrepresented in HE, that is, *efforts directed at the HEI's admission process* (Alexander *et al*. 2017; Nicholson and Cleland 2017).

[3] Widening Participation refers to interventions that encourage and provide opportunities for traditionally underrepresented individuals to consider HE by removing barriers that might otherwise prevent them from accessing HE, that is, *efforts directed at the individuals* (OFFA 2017).

There are also concerns associated with stereotyping of the social classes, with narrow views of homogenous characteristics of working-class and middle-class families (for example, the deficit-laden view that working-class parents can only provide limited educational support to their children's education, or the view that middle-class parents are active participants in their children's education). These narrow views, argues Gewirtz (2001), ignore the often-strong community networks that working-class families may be able to draw upon in supporting their children's education. Gewirtz also argues against attempts to create a homogenous society which embodies "the values and modes of engagement of a particular kind of middle-class parent" (p.376) with little room for the rich diversity of various forms of engagement with education and employment. Those who oppose the concept of WP do so amidst misgivings related to so-called social engineering (Bibbings 2006; Waller *et al.* 2014), concerns related to the financial and human costs of WP initiatives (see also section 2.8 on page 49) and concern that HE may not be the right option for all individuals.

There are tensions between fairness in admissions (related to the impartial treatment of all candidates) and the broader social justice agenda (fulfilled, for example, through contextualised admissions) (McCowan 2016), between the goal of academic excellence and that of equitable access to HE (Bravenboer 2013) and between the need, for some HEIs, to maintain their 'elite position' and the requirement to increase access (Rainford 2016). Milburn (Independent Reviewer of Social Mobility and Child Poverty 2012) states that both sides of the equity and access debate agree on the lack of equitable access to HE. He suggests that equity and excellence need not be mutually exclusive. For example, increasing the diversity of medical and dental student intakes would enhance the representation of diverse patient populations, arguably allowing future doctors or dentists to be more cognizant of diverse needs (Cleland *et al.* 2012).

Finally, for those individuals who make an informed decision to follow alternative routes (such as vocational courses), there are calls for provision of better resources for vocational education or for alternative routes to certain careers, for example, degree apprenticeships (Independent Reviewer of Social Mobility and Child Poverty 2012; HEFCE 2016b).

2.5. The political and social context of WP to HE in the United Kingdom

In order to understand the current position of WP initiatives and research in England, it is helpful to consider briefly government initiatives since 1944 in relation to both increasing and widening participation in HE. *Increasing* participation refers to expansion in terms of numbers of individuals, while *widening* participation refers to encouraging HE participation of traditionally underrepresented individuals.

WP can be traced back to the first inclusive education policy (*1944 Education Act (7 & 8 Geo.6)* 1944), which extended compulsory secondary education up to the age of 15 and increased access to education for women and those from the working classes. The subsequent Education Act (1962) led to two main changes for HE – Local Education Authorities (LEAs) would bear the cost of HE tuition fees and means-tested grants would be provided to cover living costs for those in HE (*Education Act 1962 (11 & 12 Eliz. 2)* ; Pennell and West 2005). The Robbins Report (1963) in the following year recommended provision of HE for all those who had the qualifications and the willingness to pursue it. The subsequent building of new universities and introduction of polytechnics resulted in a significant expansion of the HE sector; however this expansion also resulted in the development of a binary system of HE: largely autonomous universities and a more tightly regulated polytechnic system with a prescribed focus on 'applied' subjects (Archer *et al.* 2003). Naturally, the increased capacity together with financial support for HE *increased* participation in HE, although it is more difficult to discern the degree to which participation *widened* to include a higher proportion of students from traditionally under-represented backgrounds.

The public funding of HE remained largely unchanged until the late 1980s, when, following the 1987 White Paper and the subsequent 1990 Education Act, the burden of financing education began to shift from the taxpayer to the students and/or their families (Walford 1988; Barr 1989; Wilson 1997; Pennell and West 2005). The then Conservative Government introduced mortgage-style loans to fund fees, together with means-tested maintenance grants. The levels of maintenance grants were frozen until 1996-1997, while loan levels for HE fees were progressively increased. The number of

students HEIs could recruit was regulated by the allocation of government funding for full-time undergraduate places, termed Student Number Control (SNC) allocation (SPA and NETT 2013). Meanwhile, the Further and Higher Education Act (1992) abolished (or at least aimed to abolish) the binary divide in HE, by allowing polytechnics and some colleges to become universities (the so-called post-1992 universities) (Scott 2012). However, there have been concerns that the binary divide was, in fact, perpetuated by the persistent social divide between the traditional pre-1992 and the newer post-1992 universities (Archer *et al.* 2003; Boliver 2013; McCowan 2016). It was believed that students from disadvantaged backgrounds were more likely to be enrolled into the post-1992 institutions (Archer *et al.* 2003), a polarisation mirrored in other developed countries (see Figure 1) (Gale *et al.* 2010). The persistent social divide has implications for WP. For an individual, this could mean lower labour market returns as a result of a qualification from a less prestigious institution (Chowdry *et al.* 2013), while some of the most prestigious institutions and some of the most selective courses such as medicine or dentistry might continue to remain socially exclusive (Milburn 2012).

Contemporary discourses of WP in the UK have their roots in the publication of the Dearing and Kennedy Reports, both in 1997, the year that New Labour came to power, but commissioned by the preceding Conservative government (with bipartisan support). The Dearing Report (NCIHE (The Dearing Committee) 1997) recommended developing certain financial aspects of HE, including financial support for students, in order to meet the economic needs of the United Kingdom over the subsequent 20 years. The report recommended additional funding for those HEIs that demonstrated commitment to WP as well as replacing the mortgage-style student loans with an income-contingent loan repayable only after graduates earned above a certain threshold, as well as retention of maintenance grants. In addition, the report recommended a student

Figure 1: HEI enrolment in other developed countries (Gale *et al.* 2010)

- In the United States, individuals from disadvantaged backgrounds are more likely to enrol into community colleges than the more prestigious universities.
- In Australia, individuals from low socioeconomic status (SES) groups are more likely to enrol into regional and post-Dawkins universities, whereas those from higher SES are more likely to attend the high-status 'Group of Eight' universities.

contribution towards fees, that was dependent upon their family income. One effect of this personal contribution towards HE finance was the increasing marketisation of the HE sector, which has led to the perception of students as consumers (Bunce *et al.* 2017) with the accompanying discourses of consumerism, such as value-for-money, education as investment and consumer satisfaction (Tomlinson 2017). This has also led to critiques of the purpose of HE: shifting from scholarly transformation to consumption of knowledge (Molesworth *et al.* 2009). There were also concerns that WP itself was being adopted by HEIs as a marketing strategy (McCaig 2010) to fulfil institutional recruitment requirements rather than the social responsibility espoused by WP.

The Kennedy Report (Widening Participation Committee 1997) stressed the need for *widening*, not just *increasing*, participation. The report recommended the provision of increased access to learning for a wider cross-section of society, thereby creating a "self-perpetuating learning society" (Widening Participation Committee 1997, p.15). This report also discussed strategies for *widening* participation in higher and further education (FE), mainly through the provision of opportunities in FE for those unable to pursue the traditional academic routes of HE.

The New Labour government (1997-2010) placed education at the helm of its social policy, featuring prominently in the election manifesto (New Labour Party 1997). While several key recommendations of the Dearing Report were rejected by the New Labour government (Archer *et al.* 2003), some were implemented, including a commitment to WP in HE. The government accepted the Dearing Report's recommendation to implement income-contingent loans (repayable from earnings over £15,000) and income-contingent contribution to tuition fees (originally set at £1000), thus sparing the poorest families (Department for Education and Employment 1998), but rejected the joint system of grants and loans (Pennell and West 2005). In order to balance HE financing with their WP agenda, the New Labour government completed the shift from maintenance grants to student loans in 1998 (McKnight *et al.* 2005).

The 2003 *Future of Higher Education* White Paper (Department for Education and Skills 2003) and the subsequent Act (*Higher Education Act* 2004) set out reforms to improve funding and grants to students from low-income families. As a result, universities could charge a variable, increased fee of up to £3000, thus replacing the previous "fixed tuition

fee" (Pennell and West 2005, p.129). The Office for Fair Access (OFFA)[4] and the post of Access Regulator were created as a result of the Act, with the primary function of monitoring HEIs' outreach work and of implementing the annual Access Agreements (OFFA). Those universities which wished to charge increased fees were required to draw up an Access Agreement, which would consist of a detailed outline of the outreach activities and of student financial support as well as details of tuition fees to be charged for each course (Pennell and West 2005). The Access Agreement would also regulate the maximum increased fee a university could charge under an Access Agreement – the so-called 'fee cap' (OFFA). The New Labour government saw massive financial upheaval during its tenure in office, including the global financial recession which began in 2007. There was little overall progress on issues such as income inequality and levels of unemployment (Stewart 2009). Yet, educational ventures such as the Educational Maintenance Allowance (EMA) (see Figure 2) and Aimhigher (see Figure 3 on page 29) were lauded – EMA for its significant positive effect on post-16 participation and retention (Ashworth 2002) and Aimhigher for its contribution to improved performance at secondary schools and increasing application rates to HE by individuals from disadvantaged backgrounds (Doyle and Griffin 2012).

Figure 2: Educational Maintenance Allowance (EMA) - 2004-2012

- A nationwide scheme introduced by the Labour government in 2004
- Aimed at poorer 16-19-year olds as an incentive to continue in post-compulsory education.
- Funds independent of other benefits, paid directly into students' bank accounts and contingent upon regular attendance in education
- Widely regarded as a successful venture in promoting retention in education and progression to HE; despite this success, the subsequent Coalition government, in 2010, argued that EMA constituted "deadweight" (Independent Reviewer of Social Mobility and Child Poverty 2012, p.84), that is, many of the young individuals EMA targeted would have continued in HE anyway
- Despite widespread opposition, EMA was replaced by the 16 to 19 Bursary Fund, which, in the early years, in fact was demonstrated to have a small negative effect on post-16 participation amongst the most disadvantaged young individuals (Britton and Dearden 2015)

[4]OFFA was replaced by the Office for Students (OfS) in 2018, from the merger of HEFCE and OFFA, functioning as the independent regulator of HE in England (Office for Students 2018)

Against a backdrop of recession, a white paper on education titled '*New Opportunities: Fair Chances for the Future*' was published with a further commitment to improving social mobility and to giving:

> "…more support and encouragement to young people from families with no experience of higher education, ensuring they have the kind of mentoring and advice that their peers can expect" (Cabinet Office 2009, p.2).

WP and access were beginning to gain further momentum on the political agenda. The Panel on Fair Access to the Professions, chaired by Alan Milburn (2009), was commissioned to report on social mobility and access to professional courses. Among other things, the report stressed the importance of the role of the local community (including family) on the one hand, and the role of schools, colleges and universities on the other, in achieving access to the professions. The panel laid out recommendations, building on previous WP activities, setting up forums to assess progress on access and identifying best practice in access measures. The report laid responsibility upon the professional regulators to embed social mobility and access into their strategic plans.

The 2009 higher education framework, titled 'Higher Ambitions – The future of universities in a knowledge economy' (BIS 2009), set out proposals affecting widening access to HE. This was to be achieved by provision of better information at school (discussed in section 2.6.5, page 36), use of contextual data in university admissions (see section 2.8, page 49) and expansion of alternative HE avenues, such as foundation degrees, part-time study and work-based study (BIS 2009). Advice was also sought from the then director of OFFA, Sir Martin Harris, who later made recommendations to widen access to highly selective universities (Harris 2010). In particular, he was strongly supportive of summer schools and collaborative outreach activities, with targeted funding directed at Year 9 pupils (before GCSE choices were made). Other recommendations included evaluation and monitoring of WP activities.

In addition to a commitment to WP, the 2009 higher education framework contained a clear message to limit public funding of HE:

> "…constraints on public finances will make it impossible to sustain the growth in public spending on universities seen over the last decade." (BIS 2009, p.7)

In order to address issues related to the cost of HE, the Browne Review (Independent Review of Higher Education Funding and Student Finance 2010) was set up with bipartisan support. The strategies outlined in this review included relaxation of the SNC allocation (described on page 24 above; also see next paragraph), removing the fee cap (discussed on page 26 above; also see next paragraph), raising the threshold of student loan repayment to £21,000, creating a system of maintenance grants, extending financial support for part-time study and, for HEIs, abolition of the teaching grant in certain subjects. Other recommendations were quality assurance and transparency (in the form of mandatory provision of relevant information to prospective students by

Figure 3: Aimhigher (2004-2011)

Regarded as one of the biggest state-funded outreach initiatives in the world, involving HEIs, colleges and schools.

Created by the collaborative efforts of the then Department for Education and Skills (DfES) and HEFCE (Waller *et al.* 2015).

£1 billion invested in outreach activities by 42 regional partnerships (Doyle and Griffin 2012) over seven years.

Credited with embedding WP into mainstream institutional educational policies.

Focused on young people aged 14-19 years.

Aims:

- Raising pupil aspiration
- Improving Information, Advice and Guidance (IAG) services and, thereby, academic attainment

Activities:

- Summer school experiences on university campus
- Masterclasses, campus visits and taster days
- Guest lectures
- Mentoring

Discontinued by the Conservative-Liberal Democrat Coalition government in 2011 as a result of funding cuts amid widespread condemnation (Waller *et al.* 2015).

HEIs, including results of evaluation surveys) and demonstration of stronger commitment to WP in Access Agreements (discussed on page 27 above).

The Conservative-led Coalition government (2010-2015) acted on some recommendations of the Browne Review (Independent Review of Higher Education Funding and Student Finance 2010) with an announcement on HE in November 2010, followed by the publication of a White paper in 2011 (BIS 2011a; Barr 2012). Constraints on student numbers were (seemingly) removed – universities were given free rein on recruiting, initially, those with AAB A-level grades (roughly estimated at 65,000 students (Barr 2012)); while those HEIs that charged average fees of less than £7500 were allowed to recruit an additional 20,000 students; the student number control was removed entirely in 2015 (Hillman 2014). There were concerns that the expansion of student numbers would be at the expense of the SNC allocation to individual HEIs, that some undersubscribed courses would have to be withdrawn and that this expansion might impact on quality of courses (Taylor and McCaig 2014). The removal of SNC does not apply to certain courses such as medicine or dentistry (Jubb 2015), because the number of places for these courses "is regulated by Government and controlled through intake targets" (HEFCE 2017) and also because the funding for these courses is shared by HEFCE and Health Education England (HEE) (HEFCE 2018a). The threshold of student loan repayment was raised to £21,000. However, controversially (and by a narrow vote in parliament), the fee cap was raised to £9000 rather than removed, leading to massive and violent student protests (Lewis *et al.* 2010). The fee increase was a widely debated and hotly contested issue. Admittedly, despite fears of reduced participation by the most disadvantaged, there was no change in application levels for the most selective universities. However, applications from the most disadvantaged students were still under-represented (Harrison 2012a; Hutton *et al.* 2013) and there appeared to be an overall reduction in applications to HE (Curnock-Cook 2012).

Other educational reforms by the Coalition government (2010-2015), which were reported to have a negative impact on WP, were the withdrawal of EMA (see Figure 2 on page 27), cessation of funding for external careers advice service to 16-19 year olds (Whitty *et al.* 2015) and abolition of Aimhigher partnerships which ran from 2004-2011 (summarised in Figure 3 on page 29). Aimhigher was replaced by a new scheme – the National Network for Collaborative Outreach (NNCO) (see Figure 4) – launched by HEFCE and funded by the Department for Business, Innovation and Skills (HEFCE 2015).

The subsequent Conservative government (2015-present) further increased the fee cap to £9250 in 2018 in what was reported in some media reports as a surreptitious move (*e.g.*, Coughlan 2016). This fee cap hike was based on plans laid out in the 2016 Government White Paper (BIS 2016). It is worth noting that economists had argued during the 2012 fee rise that the £9000 fee cap would not be sustainable (Barr 2012), and a further increase was then considered inevitable. In 2018, a further review of HE fee structure was initiated, and there have been calls to consider alternative means of funding HE, such as targeted fees or means tested fees (Usher 2018). The National Collaborative Outreach Programme (NCOP) was launched in 2015 (see Figure 5).

Figure 4: National Network for Collaborative Outreach - NNCO (2015-2017)

Launched in an effort to provide a central point of contact to schools and teachers regarding WP activities in their area (HEFCE 2015).

Funding of £22 million, significantly lower than that received by Aimhigher.

Funding sources:

- Increased university fees (Grove 2013)
- Discontinuation of National Scholarship Programme (NSP) (HEFCE 2015)

Concerns:

- Expertise and experience accumulated by Aimhigher during its seven years might be difficult to reproduce (Morgan 2015).
- Funding limited to two years, raising concerns about the negative effects of short-term policies (Havergal 2016).

Figure 5: National Collaborative Outreach Programme – NCOP (2017-2020)

A national initiative launched to fulfil the Conservative government's aim of increasing the number of disadvantaged young people in HE by 2020 (HEFCE 2018b).

Funding of £30 million in 2016-2017, increased to £60 million per academic year in subsequent years, for four years, subject to review, provided to 29 consortia in England (HEFCE 2016a)

Funding targeted to those areas and schools where HE participation is lower than might be expected given the GCSE attainment

Outreach activity directed at young people aged 13-18 years

Aims:

- Double the number of disadvantaged young people in HE from 2009 to 2020
- Increase the number of ethnic minority group students in HE
- Address underrepresentation of disadvantaged young men in HE

Concerns (HEFCE 2018b):

- Lack of understanding of exact role of the programme amongst school staff
- Difficulty engaging some schools

In summary, partly in response to the changing economic climate, successive governments have attempted to change HE structure and financing, which has had variable impacts on WP. While some government initiatives (for example, the structural expansion of HE and WP initiatives such as Aimhigher) were regarded as successful, others (like the HE fees increase) were received initially with opposition and concern. Against a backdrop of frequently changing government policy, HEIs continue to be committed to WP through individual outreach activities. However, analysis by the Social Mobility and Child Poverty Commission (Milburn and Shephard 2013) shows that despite overall improvement in social representation in HE, the most selective HEIs remain socially exclusive. In particular, participation of the most disadvantaged individuals in the most selective HEIs continues largely unchanged and is lower than that of their more advantaged peers (Whitty *et al.* 2015). There is increasing pressure on HEIs, particularly the most selective ones, to make a concerted effort towards widening participation and increasing social mobility. The barriers are varied and complex (discussed in section 2.6 on page 33), often expressed as lack of academic attainment and reluctance to apply to the most selective HEIs (for example, Gale *et al.* 2010).

2.6. Perceived or real barriers to participation in HE

Although the benefits of HE (discussed in section 2.3, page 21) are acknowledged by politicians and those in the HE sector, there is compelling evidence that barriers to HE persist; these are briefly discussed below.

2.6.1. Habitus and cultural capital

Habitus, according to Bourdieu, is a set of complex predispositions and forms of behaviour acquired through experiences in early childhood and later life (Bourdieu and Johnson 1993; Bourdieu 2000). He describes the notion of cultural capital to explain the differences in academic achievements of children from different social classes (Bourdieu 1986). Cultural capital is an individual's familiarity with the dominant culture in society, thus allowing the individual to interact with that culture (Sullivan 2002; Davies *et al.* 2014). Bourdieu argues that, depending on various factors, cultural capital can be acquired and embodied, sometimes quite unconsciously, as habitus. There are studies demonstrating the effect of habitus and capital on decisions regarding HE choices – such as whether or not to apply to HE (Ball *et al.* 2002; Noble and Davies 2009; Davies *et al.* 2014), choice of course (Archer *et al.* 2012; Webber 2014) and choice of institution (Mathers and Parry 2009; Holton and Riley 2013). Habitus and the presence or absence of cultural capital have also been shown to play a role in admissions that is different from their role in the decision to participate in HE. For example, understanding of culture (through reading or participating in so-called high-culture activities like visits to the opera or ballet) has been shown to enhance young individuals' chances of successful admission to highly selective HEIs such as Oxford University (Zimdars *et al.* 2009), possibly because these experiences enable favourable performance at admission interviews. Similarly habitus and cultural capital have an impact on personal statements[5] when applying to HE (Jones 2012; Wright 2015); this issue is discussed further on page 50. Other studies argue that it is a combination of structural barriers (such as habitus and cultural capital) as well as the presence or absence of individual agency that may shape the decisions of young people in regards to pursuing HE (Haynes *et al.* 2013). This

[5] Personal statements are part of an individual's application to HE in the UK, outlining applicants' non-academic qualifications and are often used to aid admissions panels in selecting applicants to certain courses (*e.g.*, dentistry or medicine) and at certain institutions.

thesis complements this growing strand of WP research in demonstrating the value of individual agency within WP initiatives (see research question in section 2.12, page 61).

2.6.2. Social capital and aspirations

Social capital has been variously defined. The most commonly cited definitions are those put forward by Putnam (2000), Bourdieu (1986) and Coleman (1988). A unifying feature of all definitions is the function of social capital as resources linked to wider social networks which can enable certain actions or behaviour such as aspiring to or participating in education. As a corollary, the absence of particular social capital may be linked to hampering the same actions or behaviour.

Much of the dominant political discourse and a large body of research surrounding WP, both in the UK and internationally, is based on the deficit-based assumption that individuals from the most disadvantaged socioeconomic groups lack social capital; often this deficit is linked to an absence of educational aspiration (*e.g.*, Kilpatrick *et al.* 2019). The idea of lack of educational aspiration has, however, been contested by others. There is research exploring social capital, which highlights that most young individuals, irrespective of background, do not lack educational aspiration (Gewirtz 2001; Baker *et al.* 2014; Harwood *et al.* 2015; Whitty *et al.* 2015); rather, for the most disadvantaged individuals, it is the translation of those aspirations into realistic expectations, attainment and, indeed, participation in HE that is often difficult to achieve. Research also acknowledges that there may be other structural barriers to realising those aspirations, including financial poverty, school performance and low prior attainment (Chowdry *et al.* 2010; Anders 2012; Mocca *et al.* 2019).

2.6.3. Distance to HE

Some studies have shown that geographical accessibility to HEIs is an important factor in HE participation; whether in the decision-making of school leavers with lower academic attainment or ability (for example, Cullinan *et al.* 2013), or in mature students' decision to study medicine (McHarg *et al.* 2007).

Schools' framing of HE choices (that is, how strongly schools favour geographical mobility in choosing prestigious HEIs) may also influence these decisions (Donnelly and

Evans 2016), although this distance may be perceived to be more metaphorical. The metaphorical or symbolic nature of the distance may mean that apparently able young individuals might choose to study at institutions chosen by their less qualified peers (Harris 2010), rather than more selective institutions (irrespective of whether they are local or more distant), either for fear of exclusion or from a desire to remain closely connected to the local community and to their roots (Donnelly and Evans 2016).

2.6.4. Debt 'aversion'

There is a view amongst some academic and political groups that people from poorer backgrounds are 'averse' to debts. McKnight *et al* (2005) describe a perception amongst people from disadvantaged backgrounds that pursuing HE leads to higher debt and lower financial rewards. Pennell and West (2005), in examining the impact of increased university fees, suggest that students from the lowest socioeconomic groups appear more debt-averse than other groups and voice concerns that the increased fees could force some debt-averse individuals to opt out of HE. They conclude that provision of student bursaries and grants could increase HE participation of these students.

These observations of a so-called 'debt-averse' population (McKnight *et al.* 2005; Pennell and West 2005) have been disputed by other studies. Barr (2012) argues that people from poor backgrounds have mortgages and credit cards, and are not debt averse *per se*, but that the aversion to taking out loans for higher education is rooted in lack of prior attainment, lack of information, fear of the unknown and risk aversion. He suggests that these issues can be addressed by providing better Information, Advice and Guidance (IAG) in school. A report commissioned by Universities UK (Brown and Ramsden 2007) did not show any significant or sustained change in the pattern of participation in HE following the introduction of variable fees in 2003 (for discussion of fees, see page 26). Callender and Jackson's (2008) study demonstrates that finance does not influence choice of HE course or subject, although for individuals from disadvantaged backgrounds, it can affect the choice of HE location (*i.e.*, with regards to proximity to home or the availability of term-time working opportunities). Grants and bursaries have often been shown to have little impact in improving access (for example, Barr 1989; Independent Reviewer of Social Mobility and Child Poverty 2012). A report by the Independent Reviewer of Social Mobility and Child Poverty (2012) recommends

that in order to continue to encourage the most disadvantaged students into HE, the government needs to closely engage with potential applicants and provide financial advice, particularly from the less well-off groups. The idea of providing counselling for management of finances to disadvantaged individuals and their families has been proven to be effective in the United States (Torgerson *et al.* 2014). Similarly, research in Peru has shown that cost alone is not a barrier to accessing HE, which is often determined by the sociocultural environment in which the young individuals develop (Castro *et al.* 2016); this can have important implications for the way in which WP resources are directed. In the UK, this may translate to provision of appropriate IAG (Lamont *et al.* 2011; Chowdry *et al.* 2013). Harrison *et al* (2015) suggest that, contrary to popular belief, there is a range of attitudes towards debt amongst young people in further and higher education; this can help guide how HEIs provide student finance services.

2.6.5. Barriers at the university gates: *applying* to universities and meeting *admission* requirements

Barriers to university *application* and subsequent *admission* may arise because pupils from disadvantaged backgrounds might lack the appropriate academic qualifications, either through choice or through poor guidance at school (Smyth and Banks 2012), or because they might simply not apply to the most selective universities.

In the UK, cessation of government funding for external careers advice services has raised concerns about access to IAG for some of the most disadvantaged pupils, who may not receive appropriate guidance with respect to HE choices (Whitty *et al.* 2015). As a result, the provision of IAG has been somewhat patchy. Some teachers or careers advisors, through unconscious bias related to the pupils' social environment, gender and social class, may dissuade them from *applying* to the most selective HEIs (Sutton Trust (Internal Study) 2010; Basit 2012; Haynes *et al.* 2013; Moote and Archer 2017). Schools careers advisors may also inadvertently present barriers to *admission*. Partly as a result of inadequate advice from school, some pupils may not choose the so-called 'facilitating' GCSE subjects such as Chemistry and History, effectively restricting their options in relation to HE application and admission (Sutton Trust (Internal Study) 2010;

Independent Reviewer of Social Mobility and Child Poverty 2012; Boliver 2013). Inadequate IAG in the most deprived state schools also translates as poor guidance with respect to appropriate work experience (Independent Reviewer of Social Mobility and Child Poverty 2012). This has a disproportionate effect by hampering access to health professions' education (Hatcher and Le Gallais 2008), for which relevant work experience is an important selection criterion. Selection is the process (or set of processes) employed by HEIs to aid the decision of who will be offered a place to study a course (Griffin and Hu 2015). This differs from recruitment, which refers to the process of encouraging young individuals to think about pursuing (and, therefore, applying to) a particular profession or course, such as dentistry. The specific barriers and issues faced by applicants from disadvantaged backgrounds, in the context of medical and dental schools, are discussed in section 2.8 on page 49.

Fear of social exclusion in the most selective universities might also dissuade some individuals (Social Mobility and Child Poverty Commission 2013), such that high-achieving pupils from disadvantaged backgrounds do not *apply* to the most selective universities or to the most selective HE courses (The Sutton Trust 2004; Cook 2012; Boliver 2013; Russell Group Universities 2013; Shiner and Noden 2015; Budd 2016; Montacute 2018). Even when young people from disadvantaged backgrounds do consider applying to the most selective courses or universities, they face barriers to meeting the universities' *admissions* criteria (such as by failing to choose 'facilitating subjects' as described in the paragraph above). Institutional cultural practices at HEIs might drive approaches to undergraduate admission procedures, so that even seemingly fair approaches might exclude those that lack the kinds of cultural capital described in subsection 2.6.1 above (Whitty *et al.* 2015). Notwithstanding these concerns, a study by Reay *et al* (2009) found that some high-achieving individuals from disadvantaged backgrounds who did study in selective HEIs did not feel excluded and the authors suggested that they had developed resilience and the ability to adapt between their worlds earlier in their lives.

2.6.6. Summary

This section highlights the multiple, complex and dynamic nature of the barriers to HE participation: cultural constraints, geographical or metaphorical distance from HE,

financial advice and IAG; the barriers and individual perceptions of barriers they face change with changing political and social conditions. It is worth noting that there is a small, but growing body of literature demonstrating the shifting pattern of the perceived barriers. Harrison (2019) demonstrates the shifting attitudes of young people towards the so-called risk of pursuing HE, and argues that many disadvantaged young individuals view HE as a means to secure better jobs in an increasingly 'graduatised' labour market. In a study exploring the perceptions of final-year school pupils towards medical education (Alexander *et al.* 2019), the study participants did not report commonly identified barriers to medicine: financial, cultural or lack of IAG; perhaps surprisingly, the perception amongst this group was that academic achievement could be managed by sheer willpower and determination. The authors concede that while generalisation is not possible based on a single study, it is likely that young individuals' attitudes to HE, particularly those from disadvantaged backgrounds, may have changed since WP initiatives became embedded in mainstream HE policy. Individual agency and young people's perceptions of HE are also perceived to be factors that have an impact on participation in HE (Haynes *et al.* 2013). It is difficult to assess how these changes in attitude translate into HE participation rates, since the numbers of applications from disadvantaged individuals is still significantly lower than those from their advantaged counterparts (Harrison 2019). What is clear from the above discussion is that there is a need for better targeting of IAG towards pupils that need it most, in order to address issues related to educational inequalities and social mobility. Haynes *et al* (2013) suggest that particularly for the most disadvantaged individuals, IAG should not only comprise the provision of advice but training of pupils in strategies to help them make decisions regarding courses or subject choices and eventually, future career decisions. Webber (2014) also similarly suggests that HEIs should be involved in IAG by providing disadvantaged individuals with guidance on topics such as interview techniques. In that sense, IAG is closely related to WP and if the most disadvantaged pupils are being excluded from appropriate IAG, it could be argued that similar exclusion applies when targeting pupils for WP activities (see subsection 7.5, page 159), so that WP activities are not being accessed by the most disadvantaged pupils. As we shall see in section 2.9 on page 51, there are no studies examining strategies employed by school staff to target

pupils for WP initiatives. This thesis contributes to existing knowledge by examining targeting of pupils by school staff (Chapter 7).

2.7. Strategies to widen participation

2.7.1. Introduction and outline of section

Strategies to widen participation may be initiated by HEIs or by schools and/or as a collaborative initiative between the two – underpinning the goals of providing accessibility to and availability of HE, and raising aspiration and attainment of potential applicants to HE (Gale *et al.* 2010). Broadly, strategies may represent a combination of one or more of the following principles (Gorard *et al.* 2017):

- HEI efforts to widen participation:
    - Outreach activities to encourage disadvantaged individuals to apply to university
    - Use of contextualised admissions
- Secondary school efforts:
    - Initiatives to improve academic attainment so as to increase eligibility for university admission

The section begins with a discussion of the rationale behind the strategies (subsection 2.7.2). The interventions are then discussed in some detail, including summer schools (subsection 2.7.3.1), on-campus and in-school visits (subsection 2.7.3.2) and peer mentoring (subsection 2.7.3.3). Contextualised admissions are discussed in section 2.8 on page 50. WP strategies led by secondary schools (often closely associated with initiatives run by HEIs) are not explored in this thesis as these activities are outside the main focus of this study. The section concludes with observations of the main findings from the literature and any gaps identified in this regard, as well as how this thesis contributes to our understanding of strategies to widen participation (subsection 2.7.4).

2.7.2. Rationale underpinning the strategies

It has been argued that there may be four stages in the life cycle of an individual, which can be targeted by WP activities – secondary school, when decisions about subject

choices and career options are being made; admissions phase; university life (during HE or FE) and life after HE or FE (Independent Reviewer of Social Mobility and Child Poverty 2012). The greatest number of WP initiatives (including A2D) and associated research are focused at the secondary school and admissions phase, although there is increasing emphasis on supporting individuals during their journey through university life (*e.g.*, Brosnan *et al.* 2016; Mountford-Zimdars *et al.* 2016), in order to support diversity of the student population and to reduce attrition within a high-cost venture such as HE (Akinla *et al.* 2018). There are few (but gradually increasing) studies discussing life after HE or FE (*e.g.*, Bathmaker *et al.* 2013). While the importance of targeting individuals for WP as early as the primary school phase is recognised for developing learner identities at an early age, anecdotal evidence suggests that these activities are expensive to administer and that the effectiveness of activities at this stage is difficult to assess mainly because of the difficulty tracking individuals as they progress from primary school into secondary school or HE (Bowes 2013; Moore *et al.* 2013).

Most HEIs in the UK have a WP strategy in addition to an Access Agreement (Bowes 2013). The WP strategy, when present, is either a standalone strategy or a component of the core institutional strategy, including marketing, recruitment and admissions. This difference is dependent partly on the type of institution – generally, the more *inclusive* institutions, which recruit mainly WP students, have a WP strategy embedded within their core institutional strategy, while more *selective* institutions generally have a separate, standalone WP strategy, administered by a dedicated WP office (Bowes 2013).This difference is important because those institutions with an embedded WP strategy are more concerned with retention of the large numbers of WP students they recruit, while the highly selective HEIs place a greater emphasis on the recruitment of disadvantaged individuals, *i.e.,* widening access.

2.7.3. WP activities

Outreach or WP activities directed at the secondary school and admissions phase may include visits to schools by HEI staff and/or students, campus visits by selected pupils (comprising single events, summer schools or residential activities), careers fairs (at schools and/or HEIs), mentoring, foundation year courses, financial assistance or financial counselling and formation of formal partnerships (Universities UK 2009; Bowes

2013). These activities may either be conducted as isolated events or may form part of a wider programme (such as A2D, for example). All these activities or interventions are seen as a way to provide IAG; and can help improve aspiration, attitude and attainment or progression to HE (Gale *et al.* 2010; Kilpatrick *et al.* 2019).

A combined programme of activities has been found to demonstrate positive outcomes in terms of aspiration towards and progression to HE; financial assistance and financial advice (as it relates to HE participation) has also been found to be effective in improving aspiration to HE (Younger *et al.* 2019). Although there is no clear evidence of what combinations are most successful, some research indicates favourable outcomes regardless of the type of activity, suggesting that any type of WP activity encourages and promotes HE participation and that it is the participation in a range of activities that may be important for progression to HE (Moore *et al.* 2013). The literature also suggests that activities that are intensive or long-term appear to be most successful (Sasia 2008; Gorard *et al.* 2012; Moore *et al.* 2013; Kaehne *et al.* 2014); the latter presumably by allowing HEIs to develop relationships with schools and therefore, with the young individuals being targeted. This research study cannot fully contribute to understanding of reasons for this effect; nevertheless, the findings related to activities in A2D will demonstrate the mechanism by which activities can help to achieve the aims of WP initiatives (see section 8.4, page 207).

Figure 6 below is a schematic representation of the types of activities undertaken in a WP initiative. The WP initiative (blue circle) is located in the conceptual space shared by HEIs (blue square box) and schools (orange square box). The typical activities of WP initiatives are represented by the green circles. The cloud on the right denotes the general aims of WP initiatives.

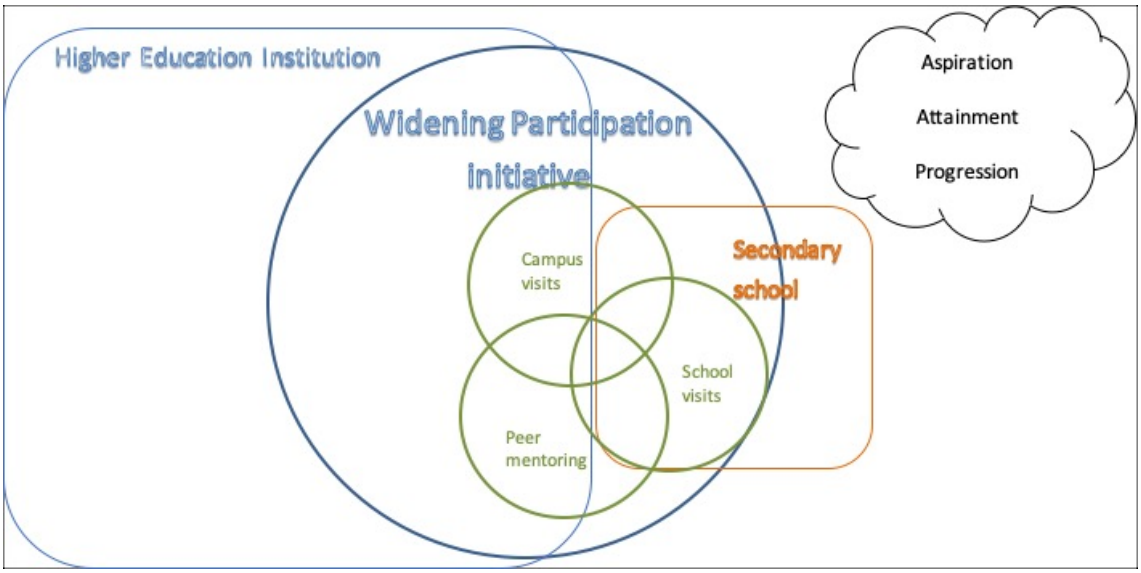

Figure 6: Aims of, and activities in, a WP initiative

2.7.3.1. Summer schools

'Summer' schools (which may also occur during other holiday periods during the academic year) are intensive programmes (residential or non-residential) comprising activities conducted over a period of few days within HEI campuses. These aim to familiarise individuals with the HEI, provide generic study skills and, in some instances, introduce subject specific content (Watson 2005; HEFCE 2010). A typical summer school may include activities such as masterclasses, guidance on HE application and admission, insights into life in HE and future career options following graduation.

Summer schools are directed towards pupils targeted by criteria (see also section 2.9, page 51) that include varying indicators of disadvantage as well as prior academic attainment (as a proxy for future academic potential). By their very nature, therefore, summer schools are one of the most intensive and one of the most expensive activities in any WP initiative. However, they are popular amongst WP providers because of the positive participant perceptions (Watson 2005; HEFCE 2010), association with improved attainment at school (Moore *et al.* 2013) and greater likelihood of progression to HE (HEFCE 2010), including to those selective HEIs that host summer schools (Hoare 2011). The reasons for these benefits of participating in summer schools have been explored, particularly in relation to Aimhigher (HEFCE 2010). However, the mechanisms by which summer schools achieve the increase in HE participation is not so clear (see Hoare 2011,

for example). Whilst summer schools have been considered important to progression outcomes in the literature, A2D (the WP initiative at the centre of this doctoral study) did not involve summer schools because the initiative was focused on the long-term relationships that might enable progression to HE (subsection 5.1, page 94).

2.7.3.2. On-campus and in-school visits

On-campus visits in the form of taster sessions or masterclasses within HEI campuses are designed to expose pupils to the possibility of HE in general and to certain subjects or HEIs – the latter may be viewed by critics as a marketing exercise for the HEI (Gale *et al.* 2010; Gartland 2013). Visits to schools are useful for establishing contact with the schools themselves and with pupils and as means to provide IAG and raise pupil aspirations. In-school visits may be in the form of extensions of, or specifically tailored, lessons designed to encourage pupils to consider HE as a possibility or to provide formal academic teaching (Doyle and Griffin 2012). Between the two types of activities, most reviews and research describe a more positive association between campus visits and progression to HE, arguably because they bring potential applicants into direct contact with the HE environment (Bowes 2013; Gartland 2015). Campus visits also have the potential to demystify HE for the most disadvantaged individuals by reducing the unfamiliar and unknown nature of HE for these individuals *(ibid*, Harrison *et al.* 2018) and provide them with tangible experiences of HE (Fleming and Grace 2015). On the other hand, not much impact is attributed to school visits per se and these are usually a small part of larger WP initiatives, often considered by school staff as inferior to campus visits (Gartland 2013). It could, of course, be argued that some of the individuals targeted for campus visits or school visits may have been on course to pursue HE, raising questions about the value of these activities (Gale *et al.* 2010) – although this could equally be a potential pitfall of targeting strategies (see section 2.9.2.3 on page 54) rather than the activities themselves.

In the delivery of both, on-campus and in-school visits, HE students are often recruited (as ambassadors) to deliver outreach activities with the explicit aim of raising aspiration and attainment (Gartland 2015; Harrison *et al.* 2015). Activities, whether in schools or at HEIs, can take the form of formal taster sessions and masterclasses as well as informal and interactive workshops and practical sessions. Student ambassadors need to be used

thoughtfully. For example, Gartland cautions against using student ambassadors to deliver didactic sessions, such as lectures, suggesting that the nature of a lecture activity serves to emphasise the differences between the WP participants and the student ambassadors. In contrast, where outreach activities are of a collaborative nature in the form of interactive workshops or informal discussions, the learning is shared between pupils and HE student ambassadors. In these contexts, the social interaction is instrumental in developing individual identities (Gale *et al.* 2010; Gartland); this identity development is attributed to the 'role-modelling' function of student ambassadors and to the interaction between the HE students and school pupils. The informal learning is also important because pupils value the so-called 'hot knowledge' that can be obtained from the student ambassadors, *i.e.*, knowledge grounded in the perspectives of those in similar positions (Ball and Vincent 1998; Gale *et al.*). We will return to 'hot knowledge' in section 8.2.2.1, page 172.

While the literature discusses the importance of pupils' identity development, there are no studies exploring what, if any, effects the work of being ambassadors has on the HE students themselves (although similar effects on peer mentors has been described in the literature; see subsection 2.7.3.3 next). The findings of this thesis contribute, in a small way, to recognising this change in HE student identity (subsection 8.2.1, page 166). A Figured Worlds approach (section 3.4, page 66) will enable greater understanding of the mechanisms by which the design of WP activities can support identity development in both school pupils and HE students.

2.7.3.3. Peer mentoring

The concept of mentoring has numerous, and often confusing, definitions despite being extensively researched (Clark and Andrews 2009; Carragher and McGaughey 2016) and despite the recognition of its benefits (Crisp and Cruz 2009). Some of the diversity in defining this concept relates to the terminology encompassed by the concept (Scanlon 2009) and to the diverse functions of this relationship (Gershenfeld 2014), *e.g.,* role modelling, coaching, guidance, advice. It is however agreed by most researchers that the range of terminology is largely encompassed by the key purpose of mentoring, *i.e.,* the idea of people helping others (*e.g.*, Egege and Kutieleh 2015).

Mentoring in educational contexts can take varied forms, such as academic staff tutoring HEI students or school pupils, peer-to-peer support within schools or HEIs (Roberts and Weston 2011) or HEI students tutoring school pupils. This form of mentoring, between pupils or students, is variably referred to as 'peer mentoring' (Moore *et al.* 2013; Carragher and McGaughey 2016; Foy and Keane 2017) or 'near-peer mentoring' (Akinla *et al.* 2018) and is based upon a core supposition that young people can significantly affect the thinking of other young people. Peer mentoring is a reciprocal relationship, unlike the hierarchy of other forms mentoring, *e.g.*, teacher-student mentoring, which is shaped by the difference in status between mentor and mentee. In peer mentoring, learning is shared between the mentor and mentee through mutual exchange of knowledge. In WP, peer mentoring refers to the relationship between HE student mentors and school pupil mentees and is seen as a crucial way to improve engagement of young individuals with HE and to raise their aspirations, by building relationships which would not otherwise be possible through other WP activities (Smyth and Banks 2012) and by enabling pupils to identify with the HE student mentors (Drummond *et al.* 2012). This is the definition and role that has been adopted for the purpose of this thesis.

A mode of mentoring that is gaining popularity in educational and employment contexts is 'online mentoring' or 'e-mentoring' (Bierema and Merriam 2002). Online mentoring is carried out using electronic communication, via text messages, e-mail or other secure, bespoke messaging platforms (Single and Single 2005) and can either be the exclusive mode of interaction between mentors and mentees or blended with varying levels of face-to-face interactions (Chong *et al.* 2019). As we shall see in subsection 8.3.3, page 204, online mentoring was adopted by the Project Core Team for A2D as the WP initiative evolved.

The characteristics of a peer mentoring programme are difficult to identify in the literature as there is no single mentoring model (Egege and Kutieleh 2015). As a minimum, a mentoring programme should have aims and objectives, identification of the focus of the mentoring (*e.g.*, academic, pastoral role, social engagement), criteria for selection of mentors and mentees, training and support for mentors, guidance on the structure of the mentoring process and finally, a structure for evaluation of the mentoring programme. In the case of online mentoring, further consideration must be

given to online security and confidentiality as well as the usability of the technology. Irrespective of the type of mentoring, there is an evolution of the mentor-mentee relationship, in the form of stages, which are described and named in different ways in the literature (Kram 1983; Mentor Network 2014). Broadly, there are three stages:

- The introduction stage (which, for this thesis, I refer to as the 'Ice-breaker stage'; see subsection 8.2.2.2, page 177). The mentors and mentees meet and develop a relationship with one another. This stage is considered crucial to mentoring because this is the stage at which visions and expectations are formalised for the mentors and the mentees (Kram 1983). Relationships developed at this stage can enable successful achievement of the aims of mentoring; failure to develop this relationship could result in failure of the mentoring programme, at least for those individuals (Taylor 2018).
- The core mentoring stage, sometimes referred to as the "Cultivation stage" (Kram 1983, p.7), when the established mentoring relationship is used to fulfil the previously defined functions of mentoring and to enable meaningful interactions. In this way, both, mentors and mentees begin to see the benefits of the relationship.
- The final stage (which I will term the 'Consolidation stage'), occurs towards the end of the mentoring partnership. During this stage, the mentoring relationship evolves and may eventually terminate.

The benefits of peer mentoring may be experienced by both mentors and mentees (*e.g.*, Storey 2005; Roberts and Weston 2011). Mentees benefit from "increased academic and social integration, social support and development support" (Gershenfeld 2014, p.2). Mentors experience psychosocial benefits (increased satisfaction with work or study, greater engagement) and gain transferable skills (such as communication skills, organisational skills and appreciation of diversity) (Bunting and Williams 2017). Similar benefits are ascribed to online mentoring, with the added advantage of mentoring for individuals who are geographically difficult to reach or mentoring in situations where scheduling constraints might otherwise pose a barrier (Bierema and Merriam 2002). In WP contexts, pupil mentees feel more engaged with school work and better equipped to apply to university through a growing understanding of HE (Andrews and Clark 2011)

and of particular subjects (Wilson and Grigorian 2019). School support staff also report that mentored pupils demonstrate greater engagement and commitment towards coursework (Roberts and Weston 2011). Jackson and Price (2019) suggest that the benefits of formal mentoring are felt by mentee pupils' non-mentored peers as informal, hidden mentoring. For HE student mentors, the benefits include a sense of fulfilment (Carter *et al.* 2018), enhanced employability through the development of organisational, teamworking and interpersonal skills (Raven 2015) and greater commitment to working with young people in the future (Roberts and Weston 2011; Foy and Keane 2017). Similar benefits were described by the mentors and mentees in A2D based on their initial experiences of the 'ice-breaker' stage of mentoring (subsection 8.2.2.2, page 177).

Many of the limitations of the mentoring process relate to particular aspects of the mentoring programme. Mentoring is highly dependent on appropriate matching of mentors and mentees. Thus, inadequate targeting (whether this relates to targeting of the mentee pupils or of the mentor HE students) can lead to unsuccessful mentoring and failure to realise the goals of mentoring. Another limitation is that mentoring may only be suitable for certain groups of mentees, such as those who lack confidence and those that are highly motivated towards achieving their educational or career goal (Foy and Keane 2017). Other limitations arise from the lack of appropriate support or training for student mentors (Yomtov *et al.* 2015; Taylor 2018) or from the absence of clearly stated aims and structure of the peer mentoring programme. Online mentoring can be limited by access to technology or the type of electronic platform used (Chong *et al.* 2019), although that may be less of an issue for the young people that participate in WP initiatives, who are the so-called digital natives. Developing relationships between mentors and mentees may be difficult in the absence of or with limited face-to-face interactions (Bierema and Merriam 2002), although these can be mitigated by careful planning of the online mentoring.

Some of the limitations of mentoring relate to the lack of systematic research which itself is a result of the paucity of predefined mentoring models (Egege and Kutieleh 2015). The literature on online mentoring is sparse with few studies analysing the electronic interactions and even fewer in educational contexts (a review by Chong and colleagues (2019) examining mentoring in postgraduate medical training identified 18

studies relevant to their review). In older reviews of mentoring studies (Jacobi 1991; Crisp and Cruz 2009), a guiding theoretical perspective was often found to be lacking. This trend is gradually reversing and Gershenfeld (2014), in her review, reported that there is now evidence of a range of theories that guide mentoring research, *e.g.*, social and cultural capital (Duckworth 2015), social integration theory (Collings *et al.* 2014; Dos Reis 2018), communities of practice (Fayram *et al.* 2018) and transformative learning (Bunting and Williams 2017). The variety of theories reflects the outcome measures evaluated in the different studies such as aspiration to HE (as in WP initiatives), retention and progression to completion of HE courses within educational contexts and workplace integration in employment contexts. This thesis advances our understanding of the mechanism by which peer mentoring evolved in a WP initiative through the theoretical lens of Figured Worlds (Holland *et al.* 1998) (see research question in section 2.12, page 61).

2.7.4. Summary

Literature pertaining to the strategies employed by HEIs for WP was reviewed in the preceding subsections. The largest number of WP initiatives, including this thesis, are focused on the school and admissions phase of a disadvantaged individual's life. However, there is now a growing body of literature exploring other phases in the individual's lifecycle and these areas constitute sites for future studies. Research studies have shown that a combination of activities, regardless of the specific activity, is most effective for WP (or effective at least in changing young individuals' attitudes towards HE) and that long-term or intensive activities lead to the greatest change in perceptions of disadvantaged individuals. It is not clear how these changes in attitudes translate to actual progression into or through HE. This issue was not explored in this thesis and could be a site for future research. The literature does suggest that, in relation to on-campus and in-school visits, the social interactional context of learning is important by supporting student ambassadors' role-model function in informal contexts. What is not clear in the literature is the mechanism by which strategies and activities in WP initiatives actually bring about intended benefits. This thesis contributes to this gap in knowledge by enabling a theoretical understanding of this mechanism through a Figured Worlds lens (see Chapter 8). The literature on peer mentoring in WP focuses on the role

of building relationship between HE student mentors and pupil mentees to raise mentees' aspirations towards HE and there is increasing theoretical understanding of this relationship in various contexts. A Figured Worlds lens employed in this thesis expands this theoretical understanding by exploring the evolution of this relationship in a WP initiative and the perceptions of stakeholders to this evolution.

2.8. Widening Participation in medical and dental schools

The rationale for WP to medicine and dentistry (and to the health sciences more generally) is not only individual social mobility (that is, to encourage individuals from disadvantaged backgrounds into HE), but also the social accountability of medical (and dental) schools (Larkins *et al.* 2015). Social accountability aims to ensure that healthcare professionals are recruited from diverse backgrounds and therefore more representative of the diverse populations they serve. This concept may then suggest that only healthcare professionals from disadvantaged backgrounds can provide the most effective healthcare (with the greatest possible benefits) to the population they represent (Cleland *et al.* 2012; Girotti *et al.* 2015). Arguably, it is possible that disadvantaged communities may still be successfully treated by professionals from any background, with appropriate community-based education (Wides *et al.* 2013). Others suggest that for individuals from any background, studying in a more diverse environment enables greater understanding of diversity-related issues and therefore greater insight when treating individuals from varying socioeconomic and ethnic groups (Brosnan *et al.* 2016; Steven *et al.* 2016).

The following discussion focuses mainly on medical school admissions. There is a paucity of published literature on dental school selection and widening access to dentistry, although the final report of 'Selecting for Excellence' (Medical Schools Council 2014) reveals trends in demographics of applicants to dentistry that are similar to medicine. Studies examining the effects of different selection procedures on diversity in medical admissions. concluded that using a mix of academic ability and non-academic criteria (such as professionalism, communication skills or ethical reasoning) for selection of medical applicants was more likely to ensure a socially and ethnically diverse medical student population (Griffin and Hu 2015; Stacey and Kurunathan 2015; Stegers-Jager *et*

al. 2015). The methods used to identify non-academic attributes need be carefully chosen (*e.g.*, Situational Judgement Tests (SJTs) have been shown to be more reliable indicators than personal statements or references (Cleland *et al.* 2012)).

The use of personal statements is questioned by some not only in terms of their reliability and validity (Turner and Nicholson 2011; Wouters *et al.* 2014), but also for their potential role as a proxy for cultural privilege (for example, Wright 2015). It must be noted that selectors often assess personal statements in the context of applicants' backgrounds, acknowledging that a disadvantaged background may affect applicants' lack of understanding of a medical career, but may not necessarily be an indicator of future success at medical school (Turner and Nicholson 2011).

Alan Milburn's review on fair access to the professions (2012) raised concerns that despite progress in increasing access to HEIs to all individuals, the most selective courses (such as medicine) and the most selective HEIs (such as Russell Group universities) continued to exclude disadvantaged individuals. Partly in response to this review, a report entitled 'Selecting for Excellence' was initiated by the Medical Schools Council (MSC) in 2013; the final report was published the following year (Medical Schools Council 2014). Amongst other areas (such as admission processes), the report provides guidance on WP in medical schools, including increasing geographical coverage of outreach activity, collaboration with the NHS to provide access to work experience to individuals from disadvantaged backgrounds and the increased use of contextualised admission processes, incorporating multiple contextual measures.

Contextualised admissions refers to the process of considering the social background of an applicant when assessing suitability for admission (Moore 2013). Given the fact that courses such as medicine and dentistry have competitive application processes, with stringent selection criteria, and require high academic grades at school (Medical Schools Council 2014), the use of contextualised admission processes has been controversial. Concerns that have been cited include risking discrimination against those with higher grades and possibly producing healthcare professionals with lower academic achievements (Cleland *et al.* 2012; Southgate *et al.* 2015). There is evidence, both within medicine and in HE in general (HEFCE 2003), that while most contextual measures such as socioeconomic status (SES) provide little or no additional predictive value regarding

attainment at university, the overall performance of the secondary school attended can inversely affect performance at medical school (McManus *et al.* 2012; Stringer *et al.* 2016). So, for the same A-level grades, individuals from otherwise poorly performing schools are likely to perform better at medical school than their peers from better performing schools. There is also evidence that prior performance at secondary school may not be fully indicative of academic success in HE (Hoare and Johnston 2011; McCowan 2016; Rainford 2016). These arguments may justify contextualisation of the predicted academic ability of a potential candidate against the overall school performance (so as to be able to offer a place at a lower grade) (Crawford 2014).

There may be additional costs (to the HEI) associated with WP activities. However, a longitudinal cohort study examining a WP initiative that included contextualised admission in a US medical school found that the costs of such interventions were offset by greater retention of medical students and diversity in the medical workforce, provided that academic ability was properly assessed (Girotti *et al.* 2015).

Despite the compelling arguments for WP in health professions education, there is clear tension between government policy to increase medical student diversity and the goals of medical schools to produce academically able and effective doctors (Moineau 2015). This tension results in widely varying enactment of WP policy by medical schools, which runs the risk of further hindering individuals from disadvantaged backgrounds (Cleland *et al.* 2015). There is, therefore, a need for WP activities within medical (and dental) schools to be robustly planned, implemented and evaluated against government WP policy, in order to ensure the best possible outcomes for applicants.

2.9. Targeting for WP

Targeting refers to the methods used to identify and select individuals for participation in WP activities (Dent *et al.* 2013). Typically, those targeted are young people who have the potential to progress to HE, but, for a variety of reasons, are unlikely to do so without appropriate interventions and guidance (Harrison and McCaig 2015). It is worth noting that the young individuals are usually targeted for WP initiatives by their schools; the schools, on the other hand are targeted by specific HEIs.

This section begins with a discussion of the drivers for targeting, followed by a discussion of the issues surrounding targeting, including research exploring these issues. In this regard, although the importance of effective targeting is acknowledged in the literature, empirical research into the mechanism of targeting of school pupils is lacking, thereby constituting a gap in the literature which will be fulfilled by the findings of this thesis (section 7.3, page 141).

2.9.1. Drivers for targeting

The following key drivers for targeting in WP initiatives have been identified (McHarg *et al.* 2007; Dent *et al.* 2013; Whitty *et al.* 2015):

- Focusing WP initiatives towards those that most need them
- Making best use of limited resources
- Selecting the most effective approaches to WP
- Reporting requirements in relation to annual Access Agreement statements to OFFA (OFFA)

Targeting can be universal (*e.g.* talks by HEIs at targeted schools for general aspiration-raising), group specific (*e.g.* workshops on careers in science and engineering, directed at girls) or individual (*e.g.* one-to-one peer mentoring). Targeting should be aligned with the aims and principles of the HEI (Dent *et al.* 2013). A targeting strategy requires a clear definition, well-developed eligibility criteria and robust implementation of the criteria for selecting learners; although, in reality, the implementation of targeting criteria is challenging (Harrison and Hatt 2010), and often relies on school staff (effectively gatekeepers) involved in WP projects.

2.9.2. Issues related to targeting

Targeting is, arguably, a complex issue. While definitions of under-representation and recognition of eligibility criteria are clear, there is no perfect targeting methodology that identifies all potential HE participants and that has a significant impact on under-representation in HE (Harrison and Hatt 2010; Waller *et al.* 2015). From an economic standpoint, effective targeting is necessary for the appropriate use of scarce WP funds; on a more practical level, under-representation in HE cannot be truly addressed unless

the 'right' individuals are selected for WP interventions. HEIs have a role in providing clear guidelines to schools on targeting requirements (Dent *et al.* 2012). Furthermore, as concluded by a report to HEFCE reviewing research into WP to HE (Moore *et al.* 2013), studies monitoring outreach have not specifically addressed targeting methodologies. Key issues related to targeting are described below.

2.9.2.1. Perpetuation of social divide

Some studies (McCaig 2016; Rainford 2016) argue that targeting can lead to a sorting system whereby the brightest of the traditionally disadvantaged students are matched with the most prestigious HEIs (largely the pre-1992 universities), forming a small proportion of their student intake; these HEIs then maintain their high status in the league tables. The post-1992 universities are consequently left with what has been referred to as "access saturation" (McCaig 2016, p.216), that is, the overwhelming majority of their students are so-called WP students, including those that could not access the most selective HEIs (Rainford 2016). This risks further reinforcing the binary divide between the pre-1992 and post-1992 institutions, an issue discussed on page 25, leading to negative consequences for graduates of post-1992 institutions (lower labour returns as a result of graduating from a less prestigious institution) and for selective HEIs (which might continue to remain largely socially exclusive).Those designing WP initiatives, particularly in selective HEIs, need to be sensitive to this issue when developing targeting guidelines, so that young individuals do not experience exclusion or stigmatisation as a result of targeting (see also, subsection 2.9.2.4) and so that targeting fulfils the aim of social diversity in these HEIs.

2.9.2.2. Access to and use of proxy data

An effective targeting approach may require shared ownership of data-gathering between HEIs and schools or colleges. However, despite best efforts, individual information is notoriously difficult to gather, as a result of difficulty in getting information from pupils or their parents and in negotiating data protection minefields (Harrison and Hatt 2010). The difficulty in data sharing may necessitate a level of trust between HEIs and schools, so that the 'right' individuals are targeted for WP activities. This difficulty may be addressed by collaboration and establishment of information

sharing guidelines as well as the appointment of data protection officers at institutions (Dent *et al.* 2013).

Difficulties in data sharing also mean that WP practitioners often use proxy data, such as parental HE, parental income, school type, or geographical data, as indicators of low socioeconomic background. This approach has not always met with success and can lead to targeting that is flawed. For example, previous Aimhigher partnerships in the southwest of England used a dual targeting strategy of identifying those with potential to benefit from HE and those with no parental experience of HE. The effects of this strategy were evaluated in a study which concluded that although there continued to be under-representation from the lowest socioeconomic groups, Aimhigher's targeting strategy appeared to be successful (Hatt *et al.* 2005). However, Harrison and Hatt (2010) argue that the success of that strategy was predicated on the matching of individuals to the proxy indicators rather than on the disadvantaged individuals' circumstances. This strategy, of targeting individuals against proxy indicators of disadvantage, does not necessarily translate into success in truly addressing under-representation of disadvantaged individuals in HE.

There has been longstanding concern about the use of geographical data in selecting disadvantaged individuals for outreach activity (*e.g.*, Harrison and Hatt 2010). Harrison and Hatt warn against the rigorous application of area-based guidelines for targeting for WP activities. For example, the use of low-participation neighbourhoods (LPNs) may fail to identify disadvantaged individuals who live in areas of relative affluence (Harrison and McCaig 2015).

2.9.2.3. Inappropriate use of targeting guidelines

The HEFCE toolkits for targeting (Dent *et al.* 2012; 2013) provide basic scaffolding through the guidelines. However, in the absence of clearer guidelines (on targeting or their evaluation), it is left to HEIs to devise and monitor institutional targeting strategy.

HEIs may choose to engage with particular schools which are easy to access, simply because of their geographical locations or because the HEI may have established relationships with these schools through other, WP-related, activities (Harrison *et al.* 2015). Sometimes, a potentially valuable opportunity for selecting the most eligible

individuals can be lost to a more 'shortcut' methodology of selecting the most willing pupils from a handful of the most able cohort. The opportunity is lost because some of these pupils may already be on a progression path to HE without any intervention, while others may be excluded (Waller *et al.* 2015). For example, an Aimhigher Associates Scheme designed to provide mentoring support within schools found that pupils from schools serving greater numbers of disadvantaged individuals were more likely to participate in the scheme than pupils from schools with fewer numbers of disadvantaged individuals (HEFCE 2011). Whilst this was considered successful targeting by the initiative, the methodology ran the risk that some of the most disadvantaged individuals from schools serving relatively affluent populations might fail to be engaged by WP schemes. This is problematic for truly widening participation because valuable resources may be allocated away from those that require them the most (Thomas 2001). It could further be argued that while the most disadvantaged individuals may indeed be targeted by WP initiatives, there is a potential that some individuals with lower academic attainment are excluded by the restrictive targeting criteria (Kaehne *et al.* 2014). Other studies have shown that targeting of pupils is largely dependent upon school staff (as gatekeepers). HEIs are wary of being overly prescriptive towards school staff in this regard, so as to avoid disengagement of schools from WP initiatives (Harrison *et al.* 2015). As a result, WP staff at HEIs are permissive towards, and trusting in, the judgement of school staff. Therefore targeting is subject to personal bias, with the effect that the anticipated targets of WP initiatives might be very different individuals from those eventually participating in them (Harrison 2012b; Waller *et al.* 2015).

2.9.2.4. Concerns about exclusion or stigmatisation

It could be argued that targeting might lead to further discrimination and marginalisation. For example, targeting may lead to a shift from general aspiration raising activities for all underrepresented groups to specific interventions directed at those deemed to be capable of attaining the grades (Waller *et al.* 2015; McCaig 2016); this may be a concern for some schools or colleges. Individuals not selected for WP activities may feel excluded, while those selected may feel stigmatised by being singled out for engagement with WP activities (Bowl 2012). Even financial aid for poorer students, such as the National Scholarship Programme which ran from 2012-2014 (BIS

2011b), might be targeted at the 'brightest' students based on merit rather than the degree of disadvantage (McCaig 2016). Such measures could lead to missing those most in need of outreach activities, and inappropriate use of limited funds towards those who might have progressed on to HE anyway (dubbed "deadweight") (Waller *et al.* 2015, p.13). Yet targeting is necessary to ensure that those limited funds are directed at individuals who are capable of meeting rigorous admission criteria, particularly for intensive courses such as medicine or dentistry, and are likely to sustain the pressures of the course. Research examining targeting by HEIs (Rainford 2016) suggests that targeting certain groups of pupils might in fact exacerbate the inequity in access to HE, whereby the brightest pupils are selected for the most elite institutions, excluding some others who might be in most need of WP measures.

2.9.3. Summary

From the above discussion, it is clear that the importance of effective targeting is acknowledged by the various studies evaluating outreach activities (*e.g.*, Hatt *et al.* 2005; Storan 2005; Gorard *et al.* 2006; Jones 2008; Harrison and Hatt 2010; Harrison and McCaig 2015; Waller *et al.* 2015) and HEFCE/OFFA reports (*e.g.*, Dent *et al.* 2013). Whilst the principles of targeting have been well defined, targeting guidelines are not adequately disseminated at an institutional or partnership level. Sasia and colleagues (2008) suggest greater collaborative working between schools and HEI staff, to include universal outreach activities and to provide subject-specific activities (such as in the Science, Technology, Engineering and Mathematics (STEM) subjects). Even where partnerships between HEIs and schools are well-established, there are structural barriers that make targeting the most 'appropriate' young individuals difficult. These concerns may be minimised by HEIs, by providing clear guidelines for targeting and by offering, where possible, a combination of both, universal and specific, outreach activities (Dent *et al.* 2013). However, this presents a rather simplistic outlook on targeting, that is to say, concerns regarding targeting can be minimised simply by providing schools with guidelines (in the form of targeting criteria) and expecting successful outcomes, an outlook that necessarily relegates school staff to positions of lesser power, which might further hinder effective partnership between schools and HEIs (Handscomb 2014). There is a lack of appropriate targeting methodologies and

there is a lack of research examining targeting for WP. Moore *et al* (2013) suggest balancing knowledge of local communities with defined targeting principles when designing WP initiatives. There are no studies that examine the mechanism by which school staff target pupils for WP initiatives. Furthermore, in research examining targeting for WP initiatives, the notion of teachers as important 'gatekeepers' was only briefly explored in very few studies (Waller *et al.* 2015). The thesis therefore contributes to knowledge about targeting as it relates to the evolving perceptions of all participants, particularly the school staff and the context in which this occurred. This is explored in greater detail Chapter 7 and section 9.4.1.

2.10. Current approaches to evaluating WP and gaps in the literature

Research evaluating WP can be summarised thematically: the political and social history of WP (section 2.5, page 24), the nature and causes of barriers (and aspirations) to HE participation in general (section 2.6, page 33), issues related to WP in particular subjects, such as medicine or dentistry (section 2.8, page 49) and the facets that make up WP initiatives, such as strategies employed, activities conducted (section 2.7, page 39) and targeting of pupils (section 2.9, page 51). However, recent systematic reviews of WP (Kaehne *et al.* 2014; Younger *et al.* 2019) note the lack of comprehensive or robust evaluation of WP initiatives, particularly in the UK context, which is most relevant for this study.

Research addressing the individual strategies or activities within WP initiatives has often taken an atheoretical approach towards these activities (see, for example, Watson 2005; Hoare 2011; Doyle and Griffin 2012) and often focus on outcome measures such as effects on actual or potential HE enrolment. There are few longitudinal studies of WP participants or WP initiatives; *e.g.*, the study by Kilpatrick and colleagues (2019) which is discussed in the next paragraph. Some qualitative studies are merely descriptive and Kaehne and colleagues (2014) argue that descriptions of participant experiences alone are unhelpful in assessing their usefulness for the wider WP context. Arguing from a positivist perspective, concerns about evaluation of issues associated with WP relate to the research methodology and the lack of robust controlled studies (Gorard *et al.* 2012;

Kaehne *et al.* 2014). However, as some studies have noted, it is difficult to evaluate for cause-and-effect (Waller *et al.* 2015), particularly in long-term, sustained initiatives (such as Aimhigher). Waller and colleagues also note that focusing on evaluating impact of WP activities leads to a reductionist approach, in the sense that monitoring is often loosely interpreted as evaluation. Several authors argue that evaluation approaches should focus upon the progression of targeted individuals rather than the efficacy of particular interventions (Stanley and Goodlad 2010; Gorard *et al.* 2012; Moore *et al.* 2013; Kaehne *et al.* 2014). Stanley and Goodlad further suggest that a detailed understanding of interventions should include an understanding of participants as well as institutional structures. They argue that such research may thus emphasise the notion that young individuals may be:

> "influenced by the way they interpret their worlds which may, for example, lead them to embrace or resist interventions which may have been designed for 'their advantage'" (p.9).

Those studies of WP, both qualitative and quantitative, which have a theoretical basis, frequently frame findings within deficit-model theories such as (lack of) social capital (subsection 2.6.2 on page 34) as theorised by Putnam, Coleman or Bourdieu (Basit 2012) or Bourdieu's (1986) concepts of habitus, field and various forms of capital (Mathers and Parry 2009; Smyth and Banks 2012; Davies *et al.* 2014; Webber 2014; Appadurai 2004, cited in Harwood *et al.* 2015; Brosnan *et al.* 2016; Kilpatrick *et al.* 2019). For example, Kilpatrick *et al* (2019) investigate WP initiatives aimed at young individuals in rural Australia, through the perspectives of the WP practitioners in the HEIs and the school teachers. The authors argue that the initiatives provide the participants with the cultural and social capital necessary to aspire to HE and to translate that aspiration to realistic expectations of participation. I argue that this approach does not take note of the complexity of individual circumstances that may restrict or enable HE participation or of the richness of resources within the disadvantaged rural communities studied; highlighting, instead, the deficits in the study participants (*e.g.*, belonging to rural communities) which were fulfilled by the WP initiatives. Other studies acknowledge the structural barriers faced by the study participants, but the responsibility to negotiate change or to break down the barriers appears to lie with the individuals disadvantaged

by systems often beyond their control. For example, Basit (2012), in her study of British ethnic minority young individuals, demonstrates the effects of social capital on their aspiration to HE and careers. She suggests an extension of social capital in the form of "aspirational capital" (p.130) in order to explain the educational and career aspiration of individuals who might seemingly lack social capital. The implication of these findings is that those individuals who aspire towards social mobility might achieve it, whereas those 'lacking' this aspirational capacity or capital would fail to realise their full potential; herein, I argue that the disadvantaged individuals who 'lack' the aspirational capacity are framed in a deficit lens.

Alexander and colleagues (2019) examine the perceptions towards medicine held by secondary school pupils in the UK through the lens of reflexive habitus and suggest that perceptions of disadvantaged young people have evolved since the embedding of WP into mainstream institutional policies and that these young people are able to draw upon experiences of particular role models (such as other doctors) to fashion their own identities as they inhabit multiple fields and act within these fields. However, while the authors describe the change in identities as a function of the pupils' experiences with medical professionals, this would suggest that the onus for change is on the disadvantaged young people at the centre of WP initiatives and not on the institutions organising the initiatives. I argue, therefore, that the main premise of this study too is inherently a deficit-based approach.

Whilst it is important to understand the barriers to, and enablers of, HE participation, particularly amongst traditionally underrepresented groups of people, research into WP needs theoretical lenses that account not only for the *structural (and institutional) effects* on HE participation but also the *identity* and *agency* of all individuals (school pupils, teachers, individuals from HEIs) associated with WP. Arguably, Alexander and colleagues' (2019) study and other studies (*e.g.*, Smyth and Banks 2012) do pay heed to the *agency* of the disadvantaged to challenge the taken-for granted cultural and structural barriers. Furthermore, Robb and colleagues' (2007) study examining the perceptions, towards medicine, of socioeconomically deprived 14-16 year olds from immigrant families in London identified the development of academic identity and medical ambition, which were driven by family and school influences, past experiences,

psychological factors such as resilience and the influence of peers. These authors argued that the study participants were not simply passive recipients of peer influence but actively sought friends who would enhance and complement their developing academic *identities*. It is equally important to acknowledge the existing aspirations and cultural capital of individuals from traditionally underrepresented communities, so that the *resources* these individuals bring to WP are acknowledged and validated rather than explained as a deficit that requires overcoming. For example, Harwood and colleagues utilised Appadurai's theory of capacity to aspire (Appadurai 2004, cited in Harwood *et al.* 2015) and demonstrated through their research on a WP initiative for Indigenous young people in Australia that, by recognising the existing aspirations and the cultural capital possessed by the young individuals in the study, it was possible to build upon their existing aspirations and *resources* to enable engagement with further routes to education or employment. In doing so, it was then also possible to focus attention away from the deficit that is assumed to be within disadvantaged individuals and pay more attention to the deficit that is within the educational system.

This thesis takes these concepts further by providing a theoretical lens of Figured Worlds (section 3.4, page 66) to understand how individuals – both the 'recipients' and the 'providers' of a WP initiative – enact their *agency* within the structural constraints, use existing resources and create new *resources* in the form of *artefacts* and develop particular *identities* within the Figured World of an *evolving* WP initiative (see section 3.4 on page 66 and Chapter 4 on page 79).

2.11. Summary of literature review

In summary, this chapter has outlined the competing discourses for and against WP and HE participation, the variable impacts of efforts by successive governments to change HE structure and finance in a changing economic climate and the commitment of HEIs towards WP against the frequently changing government policy. The extant literature has highlighted the barriers that disadvantaged individuals face in negotiating access to the complex and dynamic HE landscape. This chapter has critiqued the strategies employed to widen participation and demonstrated a lack of research into targeting methodologies, particularly targeting by school staff. Furthermore, the literature review

has demonstrated how, in health professions education, like in other HE courses, competing discourses of government policy, social justice agenda and HEI's educational goals result in widely varying enactment of WP policy by HEIs. Finally, a review of current approaches to researching WP identified that there is a paucity of studies framed by a theoretical perspective; those that are grounded in theory often take a deficit-laden approach; and that there is limited in-depth research on WP initiatives. There is, therefore, a need for serious re-examination of the subject of WP.

2.12. The research questions

Influenced by the strengths, weaknesses and gaps in the literature reviewed in this chapter, the purpose of this research study was to develop an in-depth understanding of a particular WP initiative (A2D) in order to understand what strategies were employed by the WP initiative that would support successful pupil engagement and evolution of the initiative and to advance theoretical knowledge of the wider field of WP. This thesis is an exploratory study that is guided by the following research questions:

What insights can be gained from a detailed, in-depth understanding of the perspectives of different groups of A2D stakeholders? Particularly in relation to:

1. Targeting the recruitment of participants for WP initiatives
2. The interpretation, enactment and evolution of the activities by stakeholders within a WP initiative (focusing on A2D's three principal activities: school visits, campus visits and peer mentoring)

Chapter 3. Methodology

3.1. Introduction and brief outline of chapter

The study of A2D is a qualitative research study. The aim of this chapter is to locate the research within a recognised methodology. The chapter will outline the constructionist epistemology driving the study (section 3.2), followed by the choice of case study methodology (section 3.3). The theoretical lens informing the study, Figured Worlds, is discussed in detail (section 3.4), highlighting the complexity of the theory and its analytical concepts.

3.2. Constructionism: Making meaning of my research

Crotty (1998) describes constructionism as the view that all knowledge, and therefore all meaningful reality, is the result of human interaction and practices, being constructed and developed out of such interactions. In its most extreme form, this notion emphasises that not only is reality entirely dependent on interpretation, but that multiple realities exist, based on the interpretations of different people (Robson 2011). This stance is considered problematic by critics for this very reason, that reality only exists in discourse and interpretation, and denies any material basis to reality, thereby arguably reducing the effects of facts such as ill-health or the economy to the effects of dominant discourses (Burr 2006). Weak constructionism, on the other hand, is guided by Max Weber's emphasis on "understanding the meaning of social actions within the context of the material conditions in which people live" (Snape and Spencer 2003, p.7). This stance acknowledges the presence of 'brute' facts, which exist independently of human thinking (for example, a tree or a river), while stressing that some conceptual categories and knowledge of facts and categories are social constructions. Thus, the existence of such categories depends on the tacit agreement of people creating them. Examples of these categories are the presidency of the United States (Snape and Spencer 2003) or the concept of Widening Participation (WP) (see section 3.2.1, below).

This qualitative research study is located within the epistemology of weak constructionism. This stance allows for a reflexive approach towards data collection and

analysis, by acknowledging the existence of more enduring aspects such as disadvantage as well as the collectively constructed perspectives of the research participants and the researcher. This standpoint also focuses on a deeper understanding of the particular context of A2D, while considering the wider context of WP. I will next discuss the social construction of Widening Participation (subsection 3.2.1), and, therefore, A2D (subsection 3.2.2); constructions that are created by social, economic and political drivers.

3.2.1. Widening Participation as a social construction

The concept of Widening Participation is socially constructed, with roots in government education policy, driven by the political, economic and the social justice agendas (discussed in Chapter 2, section 2.5, page 24). As described previously (see Chapter 1 and section 2.3, page 21), the term Widening Participation has different definitions and meanings, based on the international and temporal context. WP as a notion is constructed by those in positions of relative power (such as policy makers and educationalists) in response to changing social events. In the UK, changing governments have constructed the discourses surrounding WP (discussed in section 2.5 on page 24). The individuals at the heart of WP initiatives (the young people) have also been responsible for constructing discourses on WP – evident, for example, in the student protests following the 2011 university fee increase (Lewis *et al.* 2010), which led to a government commitment towards concerted efforts to widen participation through organisations such as OFFA and the HEIs; or the undergraduate boycott of the National Student Survey (NSS) with the aim of blocking tuition fee rises linked to the survey data (Grove 2017).

3.2.2. A2D as a social construction

A2D also is a social construction. Driven by the requirements on the HEI to provide access to, and widen participation of, individuals facing disadvantage, the staff at the dental school and the WP office (the Project Core Team; see section 5.1, page 94) actively created a WP initiative – this was then populated by other individuals who constructed various aspects of A2D and were responsible for its evolution.

3.3. Case Study – a methodology

A2D is a novel enterprise, unique in its setting and in its structure, and is amenable to be studied in detail. Through interactions with the research participants, the application of a case study methodology allows social construction of "experiential knowledge" (Stake 2008, p. 134). This section describes the case-study methodology. The different interpretations of a case study are discussed, followed by a brief outline of the types of case studies. The section concludes with a discussion of my choice of this methodology for the study of A2D.

3.3.1. What is a case study?

A case study is a strategy used to examine, in detail, the various perspectives in a particular context, using a range of data sources (Baxter and Jack 2008; Creswell 2013). The aim of a case study approach is to understand a case (or even a small number of cases) as fully as possible, using any appropriate methods, no matter how diverse the specific purposes and research questions. This approach is therefore useful when multiple perspectives are needed to provide a detailed explanation of the research issue and "where understanding needs to be holistic, comprehensive and contextualised" (Lewis 2003, p.52). There is some ambiguity about the definition, nature and uses of case study. For example, Yin (2014) refers to case study as the *process of research inquiry*, while Stake (2008) focuses on the *specific object* under study, or the *result* of that examination. Case study has been presented as a research method, a research design, a teaching tool or a methodology (Anthony and Jack 2009; Creswell 2013). For this thesis, I adopted Creswell's (2013) stance and viewed case study as a methodology that allowed me to explore a particular WP initiative (a case) in detail through in-depth analysis of multiple perspectives and data sources.

A case is always bounded (Stake 2008; Merriam and Tisdell 2015) – whether by time and place, by time and activity, or by definition and context (Baxter and Jack 2008) – and has a relatively well-defined activity pattern. Case study researchers construct knowledge not just through the experiences of the stakeholders in a case but also through the experience of studying the case (Stake 2008). So, knowledge is socially co-constructed by the researcher and the researched, thus validating different experiences

of the 'same' event. Stake (ibid) also suggests that a qualitative case study is firmly embedded within a constructionist epistemology – in its accurate description and interpretation of the various perceptions of events and in an empathetic representation of context.

The features of a case study methodology are as follows:

- Identification of a specific case, either single or multiple
- Decision regarding the intent (or type) of case study methodology (Hyett *et al.* 2014):
    - Intrinsic case studies are used to study the particulars of a single case; *e.g.*, a programme evaluation
    - Instrumental case studies provide insights on issues or refine theories through a particular case; *e.g.*, young people's aspirations
    - Collective case studies are multiple, instrumental cases which may occur simultaneously, in parallel or in sequence; *e.g.*, multiple WP initiatives conducted by different organisations
- In-depth understanding of the case through multiple sources of data and through the researcher's approach to data analysis
- Conclusions about the understanding and meaning derived from the case and its application to the wider context

(Adapted from Creswell 2013)

3.3.2. A2D as a case study

The aim of studying A2D (see research question on page 61) was to understand, in depth and in detail, the perspectives of those involved in this particular WP initiative, in order to understand what strategies were employed by the WP initiative that would support successful pupil engagement and evolution of the initiative and to advance theoretical knowledge of the wider field of WP. Drawing on the principles described in subsection 3.3.1 and applying the case study methodology to this thesis:

- The study of A2D was a single, instrumental, longitudinal case study of a WP initiative, where the particular case of A2D was of importance in itself, but was also necessary to understand the wider context of WP
- The study was bounded by a specific time frame (subsection 5.2, page 96) and by geographic, institutional and social factors.

3.4. Viewing A2D through the theoretical lens of Figured Worlds

3.4.1. Introduction

In order to develop an in-depth understanding of the case of A2D, this study interpreted the activities in A2D through a Figured Worlds lens. The concept of Figured Worlds was illustrated by Holland and colleagues (1998) in their seminal book entitled 'Identity, Agency and Cultural Worlds', and is closely related to their wider work on culture and identity development. At the start of this doctoral study, there were few research studies that utilised the lens of Figured World and those, too, were mainly in the field of education research. This lens is now being increasingly applied in qualitative research, to a range of research disciplines (as we shall see in Chapter 4). However, till date, there have been no studies of WP that have utilised this lens and this is a complex theory. This section, therefore, presents a detailed understanding of this theoretical lens in order to make sense of the findings in subsequent chapters. The section begins with a discussion of the definition of Figured Worlds and a brief explanation of the concept and its analytical components (section 3.4.2) followed by an explanation of the salient features of Figured Worlds (section 3.4.3). The various analytical aspects of Figured Worlds are discussed in detail (sections 3.4.4 to 3.4.8), followed by a critique of the limitations (section 3.4.9) and strengths (section 3.4.10) of this theoretical lens. The section concludes with a discussion of my choice of this theoretical lens for this thesis (section 3.4.11).

3.4.2. Definition and concept in brief

Holland and her co-authors define Figured Worlds as ''socially produced, culturally constructed activities'' (1998, pp.40-41) that mediate participants' behaviour, allow

identity development through improvisation and agency and give meaning to certain actions, discourses and artefacts. The perpetuation of Figured Worlds depends upon the interactions amongst the people (or figures) inhabiting these worlds. The alcohol rehabilitation programme, Alcoholics Anonymous (AA) is discussed by Holland and colleagues as an example of a Figured World, which is constituted by the social requirement to help rehabilitate individuals identified as being addicted to alcohol. By entering this Figured World, these individuals develop identities that reflect their behaviour as it relates to abstinence from alcohol. In another Figured World, the world of becoming a doctor, Bennet and colleagues (2017) discuss the constructions of diverse identities by medical students, through established discourses (such as competence and empathy) surrounding the medical professional identity. They argue that a Figured World perspective provides the basis for agency and meaning-making within the world of medicine, "whilst recognising the social structures and fields of power within which such choices are made." (p.8). Through their actions and behaviour, participants in Figured Worlds may contribute to shaping the worlds. This ability to continually shape a Figured World is one of its key characteristics (see also section 3.4.3, next).

Conceptually, Figured Worlds provide a context of meaning for action, for cultural production, for developing self-understanding or identities and for directing individuals' behaviour. Materially, Figured Worlds are evident in the day-to-day activities and practices within pre-existing structures of power and privilege (Holland *et al.* 1998).

3.4.3. Salient features of Figured Worlds

Figured Worlds have the following characteristics:

- Firstly, Figured Worlds are phenomena that develop historically and are contingent upon social and cultural principles. Individuals enter the worlds either of their own volition or are recruited into them.
- Secondly, Figured Worlds are socially constructed, and their perpetuation depends on the interactions amongst the people inhabiting these worlds.
- Thirdly, Figured Worlds distribute individuals by their landscapes of action, thus positioning them in a social context; so that particular individuals populate particular Figured Worlds (*e.g.*, a workplace, a family, a social activity). Within a

Figured World there is not simply a mechanical division of labour or role among the participants; rather, by continually participating in the activities of a Figured World, individual identities are socially constructed and are in the process of continual heuristic development (described further in section 3.4.6).

- Finally, in a Figured World, people recognise the identities and actions of other people, attach particular significance to certain actions and value certain outcomes over others. Through the activities and interactions of people (figures) in a Figured World, new meanings and identities are generated via improvisation (detailed in section 3.4.4) and production of artefacts (see also section 3.4.5).

The Figured World of A2D was produced, initially, by the social and cultural requirements on the HEI to support access to higher education for disadvantaged pupils. The figures who subsequently entered the Figured World (dental students, school pupils, staff from the HEI and the schools, and indeed, I, as the researcher) did so as a result of their particular status and their personal history, *i.e.,* they had a history in formation. The interactions amongst the various figures were the foundation for improvisation, artefact formation and identity development in this Figured World. These processes were responsible for shaping and perpetuating the Figured World of A2D and could influence the identities and behaviour of the A2D participants as they continued to participate in the other Figured Worlds of their daily lives (*e.g.*, school, family and peer group activities). As a WP initiative, A2D specifically aimed to influence Figured Worlds such as choice of sixth form studies and HE entry.

Figured Worlds are rooted in Marxist philosophy, which place importance on the liberation of the self and expansion of the mind (although this philosophy lends itself to a paradox, discussed in section 3.4.9, on page 75). So, in Figured Worlds, it is possible for people to "figure and remake the conditions of their lives" (Holland *et al.* 1998, p.45). Individuals' positions are of importance; their involvement (or lack, thereof) with a particular Figured World depends on their social position and rank as well as their personal history (Urrieta 2007). So, although, situational determinism is a strong influence on identity formation, individuals' behaviours become available as mediators in the formation of new identities. Cultural resources too may be used (as tools) and reorganised, thus recreating subject positions and forming new identities. For example,

in the Figured World of secondary school, the discourse surrounding progression to HE is a cultural resource – for some young individuals this discourse may simultaneously exist in their Figured Worlds of home and school, whereas for others, this discourse is only available in the Figured World of school. When individuals are faced with a given situation, or a Figured World, they act in response to the situation by appropriating certain behaviours or resources as artefacts, and, in doing so, have the power to change not only themselves, but also the Figured World that mediates the change. Thus, the development of identity in a Figured World is in the 'here and now'. This differs from Bourdieu's concept of 'habitus', in which evolution of identity occurs over a longer period of time, such as from one generation to the next (described in section 3.4.3.2, below).

The concept of Figured Worlds is closely situated amongst the related concepts of 'Activity Theory' and Bourdieu's 'Field', both of which are briefly discussed below.

3.4.3.1. Figured Worlds and Activity Theory

Figured Worlds are inspired by Vygotsky's notions of semiotic mediation and his subsequently developed Activity Theory (Engeström 2001).

Activity Theory is rooted in cultural-historical psychology. In Soviet Russia of the 1920s, Vygotsky formulated practical human activity, mediated semiotically, as the explanatory device for understanding the human mind. He introduced the concept of mediation, by signs and tools (artefacts), between stimulus and response (Vygotsky, 1978, cited in Engeström 2001; Bakhurst 2009). Activity Theory is a framework for describing the interactions of people using artefacts, mediated by community and rules as well as division of labour to achieve an object of the activity. The object of activity may be achieved by either common or contradicting actions of the participating people. The concept of Figured Worlds draws heavily on the concept of semiotic mediation, and further provides a context of interpretation for one's actions relative to the community as a whole.

3.4.3.2. Figured worlds, field and habitus

Holland *et al.* (1998) suggest that Bourdieu's concepts of 'field' and 'habitus' help to clarify aspects of power and influence within Figured Worlds.

A 'field' is a social structure, at least relatively autonomous, and populated by individuals (Bourdieu and Johnson 1993). The structure develops by the collective interaction of the participants and is organised around the relations of power and influence (*e.g.,* a school governing council). In Figured Worlds too, positions of power and privilege are important, but here, the identities and perspectives on the practices are developed by people in everyday relations (*e.g.,* classroom learning).

Habitus, on the other hand, reflects the individual's position within a social structure. Habitus is a set of complex predispositions and forms of behaviour acquired through early childhood experiences and subsequently in life (Bourdieu and Johnson 1993; Bourdieu 2000). Bourdieu suggests that habitus is a fluid and dynamic entity, driven by change and/or conflict. As other researchers have shown (for example, Mathers and Parry 2009), habitus can, therefore, define identity. Individuals thus construct their identity in response to changing societal structure and, therefore, changing habitus. Thus, habitus is a result of familial legacy as well as on-going social experiences. According to this principle, changes from one generation become habitus for the next. A Figured Worlds perspective on identity formation differs because a Figured World is the day-to-day construction of participants, so that improvisations occurring in such day-to-day activities are drivers for changing identities (see also sections 3.4.4, 3.4.5 and 3.4.6).

3.4.4. Improvisation and behaviour

Improvisation is an individual's behaviour in response to a set of (sometimes conflicting) circumstances in a Figured World. Improvisations occur when one's previous experiences, termed "history-in-person" (Holland *et al.* 1998, p.18), meet with present conditions in day-to-day activity. Improvisations may lead to the production of artefacts (see section 3.4.5). So, in Figured Worlds, individuals are not simply products of culture or respondents of a social situation, but producers of artefacts via their behaviour. These artefacts and the behaviour that leads to their production (*i.e.,* improvisation) can symbolically mediate formation, change or preservation of identity (see example on page 72 below).

From a cultural perspective, behaviour is mediated by cultural principles, transcending the people involved or the social situations created. From a constructionist standpoint, behaviour is a result of subject positions, which themselves are created by the relations of power and influence within 'worlds' and amongst interacting individuals. Holland *et al.* (1998) argue that a Figured Worlds perspective can put together the cultural and constructionist standpoints into a dialogic framework. This is evident in the very definition of Figured Worlds (see section 3.4.1, on page 66), which encompasses cultural constitution and social production. Thus, in a Figured World, under the precepts of cultural history and in the presence of social positioning by (sometimes powerful) discourses, improvisation occurs in response to a situation, and artefacts are produced. Over time, the improvisations may become embodied within a Figured World and become embedded in the practices of that world, to the extent that the individuals are not conscious of these improvisations (Chang 2014). In that respect, improvisation in a Figured World echoes the literature on improvisation in other settings such medical diagnosis, psychotherapy, music, theatre, combat, organisations and any other settings involving teams and/or innovation (Weick 1998; Vera and Crossan 2005). Improvisations therefore are "the central mechanism" (Chang *et al.* 2017, p.197) linking behaviour and identity development in a Figured World.

3.4.5. Artefacts

In a Figured World, artefacts are cultural resources or tools. These may be objects (which are tangible artefacts), events, discourses or even other people (all of which are notional artefacts) (Bartlett and Holland 2002), and are the mediators of human actions. Artefacts are not static entrants into a Figured World. They too, like the figures inhabiting Figured World, have a history of development; they may have been used by particular figures in other Figured Worlds, or they may have been formed during the course of interpersonal interaction and improvisation. Individuals assign meaning to artefacts, which then become the means by which individual identities are learned, new identities are formed in the presence of social positioning by powerful, often conflicting, discourses and eventually, the Figured World itself is developed and shaped (Bartlett 2007). These artefacts may be appropriated for particular situations, in any of the

Figured Worlds that individuals inhabit, and may also, over time, become a conventional part of culture, that is, the artefacts too may be embodied within those Figured Worlds.

It would be helpful to illustrate the concepts of improvisation and artefacts through an example. We will see in section 6.2, page 120, that during a workshop early on in A2D, dental student mentors improvised and changed their communication strategies in an effort to engage with the mentee pupils. This improvisation produced an artefact (a modified approach to communicating with mentees) which the student mentors could use and recommend to their peers in this Figured World. The artefact also had the potential for use in other Figured Worlds inhabited by A2D dental student mentors, such as adapting communication styles to engage patients in the Figured World of clinical dentistry.

3.4.6. Identity in Figured Worlds

Identity is a process of self-understanding, whereby people tell others and themselves who they are, and act according to that self-understanding. Identities are an amalgamation of individuals' lifetime psychological development ("history-in-person" (1998, p.18)) and of development through social interaction and participation in activities. Holland and colleagues suggest that identities are the foundations for the creation of new activities, worlds and even newer identities. They acknowledge that identity is influenced by structural constraints (such as ethnicity or gender) and subject positioning (discussed in the following paragraph), but suggest that the development of identity and agency is by participation in activities specific to a world which is "historically contingent, socially enacted and culturally constructed" (1998, p. 7).

Subject positioning is a result of relations of power and influence amongst individuals in a Figured World and may also be the result of dominant discourses and practices (Rubin 2007). When individuals communicate with one another, they not only convey a message, but also make claims to one another about who they are, *i.e.* they offer subject positions to one another and make claims about the nature of their relationships. In Figured Worlds, subject positions matter because there is room for agency through individuals' choices in accepting, rejecting or negotiating the subject positions offered to them. So, subject *positions* do not have to become *disposition*, and individuals are

continuously in the process of negotiating their identities (Luttrell and Parker 2001, emphasis in original). However, argues Naraian (2010), when subject *positions* are not available for reflection, they then become *dispositions*, which are embodied in the day-to-day aspects of their identities. Holland and colleagues refer to this process of negotiating subject positions as 'space of authoring', a term borrowed from Bakhtin (1981). When faced with social discourses or subject positions, while simultaneously bound by dominant discourses (Chang *et al.* 2017) people undertake multiple internal dialogues in forming their sense of self, thus 'authoring' and developing their identities.

Identity development is a form of "heuristic development" (Holland *et al.* 1998, p.8), involving two processes; firstly, the social interaction with other individuals, possibly other worlds or particular situations and, secondly, the creation and appropriation of products of these interactions as tools (*i.e.,* artefacts) for subsequent activities. By participating in the activities of a Figured World, individuals continuously negotiate their subject position (Chang *et al.* 2017) and, by exercising agency, they develop their identities and may even create new identities. Even within a single Figured World, these identities may be multiple and shifting, reflecting the agency of the individual and the myriad of subject positions offered (Dagenais *et al.* 2006). Next, we shall see how social or interpersonal interaction is closely related to identity and agency in Figured World.

3.4.7. Interpersonal interaction

Social or interpersonal interaction is responsible for shaping and perpetuating a Figured World. Holland and colleagues (1998) argue that this concept is significant because:

> "Social interaction is the context in which cultural forms come to individuals and individuals come to use cultural forms" (p.176).

The motivation to inhabit a Figured World is developed in the recurring social interaction within that world. So, it is through the social work and interaction with others that cultural tools may be created and appropriated as artefacts; it is this interaction that is intimately associated with improvisation and, eventually, agency and identity. Furthermore, the social interaction and the artefacts generated as a result have the potential to liberate and expand individual identity (there is an interesting paradox of constraint associated with this liberatory potential and will be discussed in subsection

3.4.9.1). Individuals assign meaning to cultural tools in the course of social interaction; they adopt the cultural practices of a Figured World through interpersonal interactions and the interpersonal interactions position and relate individuals within a Figured World. Conversely, the cultural resources (or artefacts), the actions of people and their positional identities give meaning to the interpersonal interaction; the shared social creation and recreation of the world allows participants to attach particular significance or salience to the Figured World itself. In the example of improvisation and artefact formation described on page 72 above (and in section 6.2, page 120), the interpersonal interaction between the dental student mentors and mentees led to creation of an artefact and eventually shaped the Figured Worlds of A2D and clinical dentistry inhabited by the dental students. Individuals engaging in interpersonal interaction invariably negotiate their own social position and their social relations with others. Neophytes to any Figured World develop salience and identification with a Figured World by adopting the cultural practices, by valuing and personalising the experiences and therefore developing expertise in that world, albeit to a greater or lesser degree, through a continual process of interpersonal interaction.

3.4.8. Multiplicity of Figured Worlds

Holland *et al.* (1998) suggest that at any given time, there can be multiple Figured Worlds interacting with one another, within which individuals may interact and actively participate. The social interaction within one Figured World may stem from interpretations within another Figured World. Further, there may be some uncertainty as to which (partially overlapping) Figured Worlds an interaction or an interpretation belongs. Thus, there can be differences in the way that different individuals interpret a Figured World.

The significance of this multiplicity lies in the fact that individuals may bring into Figured Worlds, artefacts, identities and experiences that were created in other Figured Worlds. The historically formed identities may shape and be shaped by the different Figured Worlds. Previous experiences may form the basis for improvisation between Figured Worlds, and may also be the driver for creation of newer Figured Worlds (Chang 2014) (see also, example on page 72).

3.4.9. Limitations of Figured Worlds

3.4.9.1. The paradox of Figured Worlds

Holland *et al.* (1998), in explaining Figured Worlds through their case studies, discuss an interesting paradox. Figured Worlds are inspired by Marxist principles of liberation of individuals from cultural determinism and the tyranny of environmental stimuli. By embracing a Figured World and creating another identity, individuals are certainly allowed a degree of liberation from certain social structures. However, in entering a Figured World, and appropriating the cultural artefacts, they are submitting themselves to certain other cultural restraints. For example, illegal drug users entering the Figured World of drug rehabilitation may not need to be so wary of prosecution but may have to accept the restraint of ceasing drug use. I suggest that any change in behaviour or identity that occurs from participating in a Figured World is a liberating phenomenon, irrespective of whether participants accept or resist positioning discourses.

Holland *et al.* (1998) also recognise that, despite the possibility of heuristic identity development, individuals are not entirely free to take up any subject position they desire; in fact, the activities and interactions within Figured Worlds are entwined within and constrained by powerful relations of hierarchy and privilege. However, these constraints of structure and institution can be the basis for improvisation, for agency and for further identity development.

3.4.9.2. Criticism of Figured Worlds

Qasim and Williams (2012) question the significance of focussing attention on the local practices of a Figured World, warning that the wider societal context may be lost. They elucidate this critique with the example of the 'Tij' songs sung by the women in Nepal (described in Holland *et al.*'s (1998) book) and question whether the narration of the domestic abuse suffered by the women in Nepal through their songs can bring about actual social change. I draw on Hill *et al.*'s (2015) conclusions on how women negotiate their identities (as surgeons) in the Figured World of surgery:

> "… the impact of such initiatives may be limited because it is not easy to directly change cultures; change may arise more organically from the

> actions of individuals, who creatively identify and make worlds from inside a culture." (Hill *et al.* 2015, p.1216)

There are some concerns that the concept of Figured Worlds is not well defined and therefore not operationalised for empirical research (Urrieta 2007), or that it is a complex theory in its entirety (Bennett *et al.* 2017). On the other hand, Urrieta (2007) argues that the strength of this concept lies in the fact that it cannot be reduced to a simple definition. Just as individuals in Figured Worlds make meaning within their worlds, researchers conceptualise the Figured Worlds that they examine in ways relevant to their study, making this concept a world of possibilities (a full review of how Figured Worlds is conceptualised in extant literature is in Chapter 4 and my own conceptualisation of this theory follows in section 9.3, page 213). Daniels (2007, p.97) suggests that the notion of Figured Worlds needs further development such that:

> "we can theorise, analyse and describe the processes by which that world is 'figured'."

The findings of this study contribute to this gap in understanding of Figured Worlds by theorising not just identity, but also the other analytical concepts that make up Figured Worlds.

3.4.10. Strength of Figured Worlds

The strength, and indeed the focus, of this sociocultural theory lies in its emphasis on identity formation through activity and cultural development. The potential for change through participation in the activities of Figured Worlds is what attracts researchers to this theory (Dobson and Stephenson 2017). In the context of A2D, this theoretical lens can help shift our gaze (at least partly) away from the presumed restraints of cultural and social disadvantage (see section 2.10 on page 57), towards improvisation, artefact formation and identity development through participation in the activities of this Figured World. So, the various analytical aspects of Figured Worlds can strengthen this sociocultural theory and provide insights into how the world is figured. Viewed from this theoretical lens, this study advances knowledge of WP initiatives beyond the static notions of achievement and underrepresentation in higher education towards an

understanding of the dynamic and evolving nature of WP initiatives, shaped by the interpretations and enactment of stakeholders in these initiatives.

3.4.11. Summary and reasons for choice of Figured Worlds in evaluating A2D

In summary, the analytical concepts of Figured Worlds – improvisation, artefacts, identity and agency, interpersonal interaction, multiplicity – have been discussed in the preceding sections. Figured Worlds are thus continuously enacted and therefore evolving through improvisation and artefact formation as well as interpersonal interaction and identity formation. Holland *et al.* (1998) developed Figured Worlds as a sociocultural means to theorise identity in practice. Figured Worlds theory is being increasingly applied in a wide range of research disciplines, from educational research (*e.g.*, Luttrell and Parker 2001; Dagenais *et al.* 2006; Caraballo 2012; Chang 2014) including medical education (Vagan 2011; Dornan *et al.* 2015; Hill *et al.* 2015; Bennett *et al.* 2017), other healthcare professions education (Elliot 2012; Olson 2015), social and political research such as experiences of graffiti artists (Valle and Weiss 2010), the experiences of individuals crossing international boundaries and living in different cultures (Wiggins and Monobe 2017) and research into community reintegration of military personnel (Cogan 2016). A review of the applications of Figured World is discussed next in Chapter 4. Most studies foreground identity and agency and, as we have seen in section 3.4.9.2, there are concerns that the theory of Figured Worlds is not developed fully enough. Daniels (2007) suggested that the analytical concepts of Figured Worlds needed further development (see also section 3.4.9.2 on page 75). Taking this point further, through this thesis, researching a WP initiative such as A2D offers a unique opportunity to develop and understand the analytical concepts of Figured Worlds, while the analytical concepts in turn contribute to the shaping our understanding of the Figured World of Widening Participation (Chapter 6 and section 9.3, page 213). With its possibility for improvisation, artefact creation and identity formation, through agency and interpersonal interaction of the participants, a Figured World perspective offers a novel gaze into Widening Participation and the specific case of A2D; it enables examination of activities and strategies within the WP initiative by giving meaning to these activities. This theoretical underpinning of the thesis thus contributes to our

understanding of the evolving perceptions of individuals and of the evolving structures inherent within a Widening Participation initiative.

Chapter 4. Literature Review II: Figured Worlds in the Literature

4.1. Introduction and brief outline of chapter

The aim of this chapter is to the review the literature on the Figured Worlds theoretical lens, relating to its application in research studies. We have seen in Chapter 2 (section 2.10, page 57) that there are several perspectives when researching WP. While the contribution of extant literature has significantly improved our understanding of WP, empirical research studies often employ a deficit-model, which limits the depth of this understanding (see section 2.10, page 57). The Figured World lens described by Holland and colleagues (1998) (discussed in section 3.4, page 66), can offer novel perspectives on WP, which will be explored more fully in Chapters 6-8.

In brief, Figured Worlds as a theoretical lens was first described by Holland and colleagues (1998); they are socially and culturally created worlds that are populated by individuals, often as a result of their personal history. Within a Figured World, individuals interact with one another; attach salience to certain actions, individuals or the Figured World itself; react to certain circumstances by applying their agency, and therefore improvising; and create or appropriate cultural artefacts during the course of their actions and interactions. Eventually, these interactions shape individual identities and shape the Figured World itself. These aspects of a Figured World, namely improvisation and agency, artefacts, interpersonal interaction and identity, have been discussed in detail in section 3.4, page 66 and are the basis for exploring sociocultural phenomena in wide-ranging research disciplines (discussed in this chapter).

4.2. Purpose of this literature review

As themes emerged from analysis of early findings in this study, it became evident that theories used for researching WP were often based on a deficit-approach, could not help to explain the emergent themes in this thesis and, specifically, failed to address the concept of 'identity'. A search for appropriate theoretical perspectives that examined

'identity' led to the concept of Figured Worlds in November 2013. Until then, my literature review had not uncovered any studies of WP that employed this lens. In order to enhance my understanding of this theory, I conducted a systematic literature review which is the focus of this chapter. The aim of this chapter is to explore how Figured Worlds has been used in other research studies, specifically in terms of:

- Research discipline
- Individual analytical components as described by Holland and colleagues (1998)

Interestingly, the literature review highlighted one other interpretation of Figured Worlds (J.P. Gee 2010). In his book on Discourse Analysis, Gee refers to Holland and colleagues' (1998) definition of Figured Worlds, but goes on to himself explicate Figured Worlds as:

> "…simplified, often unconscious, and taken-for-granted theories or stories about how the world works that we use to get on efficiently with our daily lives." (p.76)

In other words, Gee's theorisation seeks to use Figured Worlds as a tool to understand the worlds that people live in, rather than as a dynamic world that can shape identity and can be shaped by individuals. Any studies based on this interpretations of Figured Worlds have been excluded from this literature review (for a list of inclusion and exclusion criteria, see section 4.3.2 below).

4.3. Developing a search strategy

4.3.1. Keywords and search terms

In order to obtain and examine research studies that had employed a Figured Worlds approach, the search strategy employed the use of this phrase – 'figured worlds' as well as the truncated phrase 'figured world*'. The analytical components within Figured Worlds, such as 'identity' or 'improvisation', were not included in this search, since the results would encompass a wide range of disciplines and theories not related to Figured Worlds.

4.3.2. Determining inclusion and exclusion criteria

Inclusion and exclusion criteria provided the boundaries for this review, allowing me to focus the search strategy towards the aim of this section of the thesis. Setting these criteria also mitigated against my personal bias towards or against studies (Butler *et al.* 2016). A search for all published research studies framed by a Figured Worlds lens from 1998 to 2020 was carried out, with no end date. The choice of start year was a strategic choice, in order to coincide with the publication of Holland and colleagues' book describing Figured Worlds (Holland *et al.* 1998).

Table 2: Inclusion and exclusion criteria for a literature review of Figured Worlds

Criteria type	Included	Excluded
Type of studies	Published empirical research studies, including journal articles and books	Grey literature, including theses, conference abstracts and reports; commentaries or opinion pieces
Time period	1998-2020	Prior to 1998
Language	English	Any other language
Theoretical orientation	Figured Worlds theory and its analytical components, as framed by Holland and colleagues (1998)	Other conceptualisations of Figured Worlds (*e.g.*, Gee 2010)

4.3.3. Designing the search strategy

Searches were initiated in December 2013 and conducted in the following ways:

- Databases and citation indexes – EBSCOHost, Web of Knowledge, Pubmed, Proquest
- Manual searching of publications and reference lists
- Internet searches, for example, Google scholar, Google
- All studies obtained in the latter half of 2013, when I first encountered the concept of Figured Worlds: mainly papers from a single journal issue (The Urban Review, Issue 39, Volume 2, 2007) (*e.g.*, Rubin 2007; Urrieta 2007)

- A table-of-contents email alert for "Figured Worlds" from 'Zetoc' provided by the British Library
- A final formal search of the databases conducted in February 2020

Research was limited to the English language literature and an initial search of databases and other sources revealed 1266 studies. The references were exported to Endnote Web and duplicates were removed, to yield 399 studies.

4.4. Reviewing the literature

Figure 7 highlights the key steps in the search, screening and review process, utilising a PRISMA flow diagram (Moher *et al.* 2009). The steps are also described below.

4.4.1. Stage 1: Screening

Titles and abstracts of all studies were screened against the criteria listed in Table 2 on page 81 and those that clearly did not fulfil the criteria were excluded. Any studies that were ambiguous in this respect were retained for the full review. In this way, full texts of 240 studies were obtained.

4.4.2. Stage 2: Full-text screening

Full texts of 240 studies were obtained and screened, and 57 studies were excluded. Three further studies (Morgan 2008; Staiger 2013; Smart and Thompson 2017) were deemed difficult to judge against the criteria set out in Table 2 and, upon discussion with the research supervisors, these too were excluded, bringing the total of excluded studies to 60. 180 studies met the inclusion criteria at this stage.

4.4.3. Stage 3: Data extraction and quality appraisal

Data extraction and quality appraisal was undertaken for 180 articles. Data extraction forms were developed (see Table 3) and provided columns to record bibliographic data, research discipline (and specific subject if appropriate), a detailed description of how Figured Worlds had been employed and the analytical components explored, geographical location and CASP score.

Table 3: Data extraction form for Figured Worlds literature review with an example

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Stubbing E, Helmich E, Cleland J. Authoring the identity of learner before doctor in the figured world of medical school. 2018	Healthcare professions education Undergraduate medical education	The identities of medical students as they enter the Figured World of medical school, and their evolution as they negotiate their identities along preconceptions of what it means to be a doctor, against tensions of how they are positioned in medical school and their own perception of identity once they are in medical school.	Identity	UK	19

The studies were reviewed for quality in order to "assess the extent to which the authors' findings represent the participants' experiences or views" (Butler *et al.* 2016, p.245). I carried out the critical appraisal of all 180 studies using the Critical Appraisal Skills Programme (CASP) checklist for qualitative studies (Critical Appraisal Skills Programme 2018); the ten questions enabled rapid evaluation of the qualitative data. Although the tool is not designed to quantify the evaluation of qualitative research, a scoring system was created for this literature review (a template of the adapted CASP checklist is provided in Appendix 2, page 264). Each question was then scored with a three-point grading system to group the studies into three broad bands – high-quality (41 studies), moderate-quality (110 studies) and low-quality (29 studies). High-quality studies were included in the final stage of the review process. Eight studies of moderate quality in the fields of education for healthcare professions, healthcare and WP were also included in the final synthesis. The rationale for the inclusion of these eight studies was to enable an understanding of other research most closely related to this thesis. At the end of this screening and review process, 49 studies (41 high-quality studies and a further eight moderate-quality studies as described above) were included in the final review (section 4.5 next).

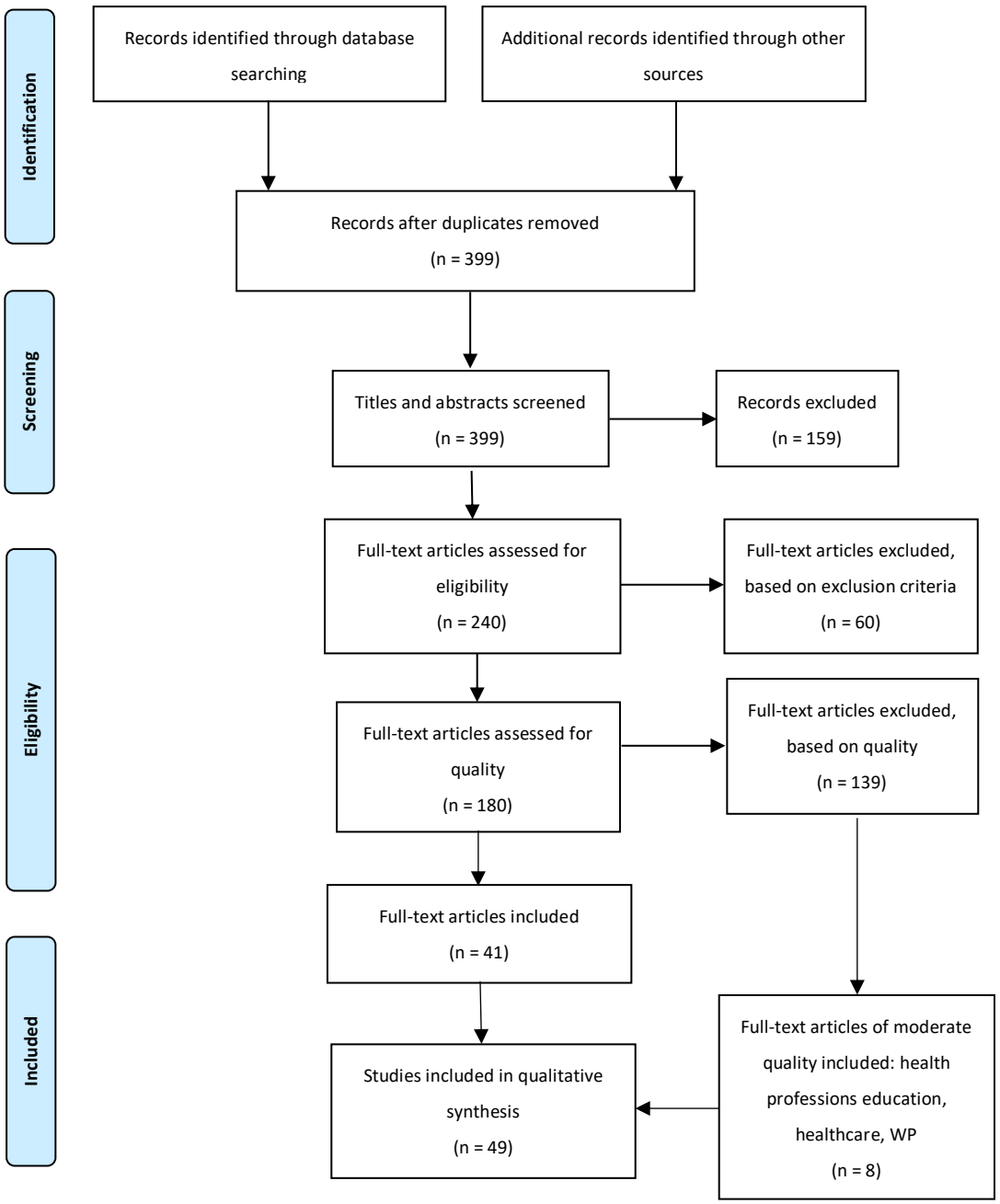

Figure 7: PRISMA flowchart showing the steps in the screening and review process; adapted from Moher *et al* (2009)

4.5. Findings from the literature review

4.5.1. Characteristics of included studies

Table 4 on page 86 below shows the characteristics of the studies. Most studies are based in the United States and Canada (n=32), followed by European countries (n=10) and four studies in the UK. It is also evident from the table that the number of studies employing a Figured Worlds perspective has increased in recent years (this trend is also evident in the excluded studies). The vast majority of the studies in this review (n=33) relate to educational research (including literacy studies and studies ranging from primary education to teacher training and doctoral education, but not including education for healthcare professions). Six studies are based within healthcare professions education research including undergraduate medical education, allied health professional education, nursing education and postgraduate medical education (see subsections 4.5.2.2 and 4.5.2.3). One study explores identity negotiations amongst female surgeons. Two studies explore issues in healthcare such as mental health and cancer carers' identity development through a Figured Worlds perspective. Two further studies (both in the US), although not explicitly described as such, explore initiatives that may be described as WP. A full data extraction table of all the included studies is provided in Appendix 3 on page 265.

Table 4: Characteristics of studies included for Figured Worlds literature review

Research discipline		Geographical location		Years	
Education	30	USA	29	2002	1
Healthcare professions education	8	UK	4	2004	2
Healthcare	3	Canada	3	2006	1
Professional careers	3	Norway	3	2007	1
Teaching	2	Australia	2	2010	2
WP	2	Ireland	2	2011	2
Politics	1	Netherlands	2	2012	1
		Denmark	1	2013	3
		Europe (unspecified)	1	2014	4
		Germany	1	2015	6
		Thailand	1	2016	7
				2017	11
				2018	8

4.5.2. Narrative synthesis

4.5.2.1. Education research

The education research literature comprises the largest number of studies employing a Figured Worlds lens. This research includes primary and secondary school education, undergraduate and postgraduate education (including doctoral education and teacher education). Most education research studies explore the negotiation, contestation and claims to identity by the study participants as they interact with their Figured Worlds (Avraamidou 2018). In these studies, the focus is on aspects of identity and agency, and whilst these are well-theorised, I suggest that other aspects of Figured Worlds, such as artefacts, could have been further developed. There are instances of improvisational activity that could have been examined to provide further insights on academic achievement and teaching pedagogy. As Bomer and Laman (2004) point out, the fact that participants are appropriating artefacts borne out of dominant discourses does not

preclude them from doing "new things with the old material" (p.427). Here, I focus on few selected studies to draw out pertinent data and insights.

Some studies explore the development of identity as individuals negotiate intersecting Figured Worlds, such as of school and family life (Quinlan and Curtin 2017) or of multiracial identities amongst university students (Chang 2014) and construct their identities, whether by being positioned or through the process of authoring. Attention is drawn to the enactment of agency and appropriation of cultural artefacts against powerful positioning and dominant discourses. The authors allude to improvisation as a means of identity development; for example, acts such as choosing cultural markers of race or creating new categories to describe racial identities. I argue that these acts represent agency on the part of the study participants in contesting dominant discourses to construct their identities.

In contrast to the above studies, there are educational research studies (Bomer and Laman 2004; Naraian 2010; Jackson and Seiler 2013) that not only explore identity practices but explicitly contribute to the development of several of Figured Worlds' analytical concepts. Bomer and Laman (2004) explore young children's identity work and literacy development as they engage in spontaneous conversation during a writing workshop. The authors argue that the pieces of writing by the children and their conversations are cultural artefacts in the Figured World of classroom activity, which the children use to position their peers and to evoke their own identities. In that sense, argue the authors, the positioning identities negotiated in this Figured World are somewhat transient and multiple, such as being a good friend or a conscientious student, dependant on the particular instances of a storyline (the writing workshop). The children also draw upon experiences from other Figured Worlds, like family life, in responding to the Figured World of classroom discourse, *e.g.,* behaving in a motherly fashion towards one another. The authors conclude by claiming that literacy development is a complex interaction of multiple experiences enriched with social and emotional dimensions, which has important implications for educators and policy makers.

4.5.2.2. Healthcare professions education research

Figured Worlds is also increasingly being applied in healthcare professions education research. In undergraduate medical education research, two high-quality studies (Helmich *et al.* 2017; Stubbing *et al.* 2018) and two moderate-quality studies (Vagan 2011; Bennett *et al.* 2017) examine the construction of medical student identities. Helmich *and colleagues'* research is a cross-cultural study comparing medical schools in Taiwan and the Netherlands and the influence of cultural context as well as emotions on medical student identity construction. Stubbing and colleagues explore the evolution of medical student identities as they negotiate tensions between their preconceptions of what it means to be a doctor, their positioning within medical school and their own perception of their identities. The authors discuss the students' agency in authoring their identities from these multiple standpoints. In both these studies, the authors explore the process of becoming doctors, *i.e.,* identity-in-practice, of medical students, with references to agency and world-making (or shaping of the Figured Worlds). However, little attention is paid to the other analytical components of Figured Worlds, such as the improvisations employed by the medical students in constructing their identities and indeed, the Figured Worlds of medical school. Instead, Helmich and colleagues discuss the concept of emotion in medical student identity formation. I would expand this assertion that in Figured Worlds, emotions can be managed through artefacts in negotiation of identity; this is evident in Holland and colleagues' discussion of the ways that individuals manage their self-confidence in the Figured World of Alcoholics Anonymous. Vågan (2011) explores medical students' identity development during communication skills training in the Figured World of medicine. He discusses how medical students acquire identities as increasingly competent students and clinical practitioners through the appropriation of artefacts (in the form of dominant discourses) within this Figured World. Bennett and co-authors (2017) similarly examine the construction of diverse professional identities by medical students through a Figured Worlds perspective. The authors explore how dominant discourses are taken up and internalised, negotiated or contested by medical students in creating specific identities. The study also problematises the tensions that arise between dominant discourses of standardised qualities required of a doctor and the need for increasing diversity of the

medical applicant intake. The study by Bennett and colleagues is deemed to be of moderate quality for the limited description of data collection and analysis and of consideration of the researcher role. The study by Vågan is also of moderate quality because the descriptions lack details such as the research design employed, the recruitment strategy, researcher position and data collection and analysis. Both studies demonstrate a clear statement of findings and the results are valuable in advancing understanding the issues of medical student identity development. In another high-quality study in undergraduate education, van Lankveld and colleagues (2017) consider the tensions faced by early-career undergraduate medical teachers as they negotiate their positioning and, through their agency, author identities in the somewhat conflicting Figured Worlds of teaching, clinical practice and research. I suggest that aspects of Figured Worlds such as artefacts could have been analysed in more detail.

In postgraduate medical education, Hill and co-authors (2015) explore the construction of trainee female surgeons' identities as women enter and perform in the Figured World of surgery, working against the constraints of masculine expectations, and against other dominant discourses at work and at home in the competing Figured Worlds of surgery and being a woman. This study was judged to be a high-quality study. Dornan *et al.* (2015) employ a Figured Worlds perspective to explore the link between emotion and professional identity amongst trainee doctors in a manner similar to the research by Helmich et al (2017). This study examines the effect of other participants in the Figured World (who are referred to as 'figures'), which affects the positive or negative emotions of trainee doctors and thereby helps shape their identities. This research was judged to be of moderate quality because the description lacked details regarding researcher role and because details regarding research design and data analysis were unclear.

In allied health professions education, including nursing, two moderate-quality studies (Esbensen and Hasse 2015; Olson *et al.* 2016) examine the professional identity formation of student nurses. Esbensen and Hasse study the negotiations of identity and actions of student nurses within intersecting Figured Worlds of nursing and technology; in clinical training on a ward as they engage with various technological artefacts (*e.g.*, a PDA (Personal Digital Assistant). The focus of their study is the intersection between the Figured Worlds of technology and clinical practice, which the participants navigate with

the help of artefacts encountered in these Figured Worlds. This study does not explore the other analytical aspects of Figured Worlds, apart from a brief discussion of intersecting Figured Worlds. Olson and colleagues explore the negotiation of professional identities amongst nursing students on an interprofessional education course. The authors discuss the students' appropriation of artefacts such as a uniform to negotiate their identities and their agency in considering change of course, thereby moving to another Figured World and negotiating a different identity. The authors also discuss the interpersonal interactions that enable the participants' identity work. Both studies were judged to be of moderate quality based on the lack of clarity related to recruitment strategy, data collection and analysis and researcher position.

4.5.2.3. Healthcare research

Olson (2015) explores the positioning of spouses of cancer patients as carers and their negotiation of this identity as it intersects with their identity in the Figured World of marriage. Little attention is paid to improvisation or artefact appropriation by cancer carers. This study was judged to be of high-quality. Another study in healthcare research (Mewes *et al.* 2017) employs the lens of Figured Worlds (alongside praxeographic account – which focuses on actions as units of analysis – and social identity theory) to explore a single cooking event occurring in a German mental health institution. Through the Figured World lens, the identity and positioning of a patient is discussed in relation to the artefacts employed by the patient (to author the identity) and by the other individuals in the setting (to position the patient in a particular role). This study was judged to be of moderate quality due to insufficient discussion of the research question, participant recruitment and the relationship between researchers and participants. In both these studies, the authors conceptualise the negotiation of identities partly through the internalisation, negotiation and contestation of multiple dominant discourses and of social positioning (for example as a carer or spouse) and partly by authoring responses to dominant discourses and social positioning (*i.e.*, enacting agency). However, there is little reference to improvisation or artefact appropriation (although cultural resources such as policy documents are referenced). Mewes *et al* (p.491) argue that "not all dimensions of a theoretical perspective are relevant". In the context of Figured Worlds, I counter this assertion and argue that Figured Worlds is a

complex theory, so in order to fully operationalise it for research, it may be necessary to include and explore all dimensions and analytical concepts of the Figured World lens.

4.5.2.4. Widening participation

Two moderately good quality studies, both based in the USA, examine the identity development of disadvantaged adolescent pupils as they are guided towards HE through different initiatives. Although neither initiative was framed explicitly as WP, the strategies employed by these initiatives are similar in some respects to those employed by WP initiatives described in the literature (discussed in section 2.7, page 39). Duncheon and Relles (2018) explore the college-readiness [6] of pupils from disadvantaged backgrounds in a 'Magnet School' through a Figured Worlds perspective. The authors examine the discourses of the school to help pupils gain admission to HE, the identity positionings afforded to the pupils through these discourses (as artefacts) and the pupils' negotiation and authoring of identities (*e.g.*, scholar). The authors conclude that while academic preparation aides may increase opportunities of access to HE for disadvantaged students, and while dominant discourses within this Figured World of school may shape pupils' potential identities in HE, such initiatives should consider the impact of their discourses on future academic performance particularly in the wider Figured World of college admissions and college itself in relation to other, possibly more privileged pupils. Rahm and Moore's (2016) longitudinal study of an out-of-school Upward Bound science programme explored the construction of potential science identities by the pupils and their positioning by their mentors and tutors in this programme. The authors argue that the identities developed in this Figured World may act as artefacts for other Figured Worlds, such as those of HE or work unrelated to science. The authors welcome the strengths-based approach of this programme whereby participants in this programme are positioned as critical scientists who bring particular skills to the programme and build on those identity constructions. The authors conclude by suggesting that HEIs and secondary schools adopt a similar strengths-based model of empowering youth, as opposed to the deficit-model currently employed by institutions.

[6] College in this context (USA) refers to HEI and will be used interchangeably with HE or HEIs.

Both these studies were judged to be of moderate quality due to limited descriptions of issues such as the studies' recruitment strategy, ethical considerations and the relationships between the researcher and participants. From a WP perspective, both studies demonstrate the effectiveness of multiple activities and strategies employed to achieve successful outcomes. Yet, in contrast to the extant literature, both studies demonstrate the importance of the agency of the individuals and their identity-in-practice as young people interact with their Figured Worlds. From a Figured Worlds perspective, these studies examine, in detail, the various negotiations of identity and agency of the study participants, with some attention to artefacts and other Figured Worlds. As we shall see in Chapters 6-8, in a WP initiative such as A2D, there is a considerable amount of improvisational activity that shapes not only individual identities but the Figured World itself.

4.5.2.5. Other research employing Figured Worlds

A Figured Worlds approach has been employed to explore mainly the negotiation of identity amongst school teachers (Lara and Franquiz 2015; Powell 2016), in research examining professional career development (Naraian 2010; Terosky and Gonzales 2016) and outside the realm of educational research in immigration studies (Hoffman *et al.* 2017), similar to the theorisation evident in the studies reviewed in the preceding subsections.

4.6. Conclusion

In summary, the literature review has demonstrated the dominant utilisation of Holland and colleagues' theorisation of Figured World in furthering understanding of identity, thus focusing on the individual as the unit of analysis. Some studies have emphasised the focus on the collective social practices and the social interactions that shape the worlds under study. The purpose of this literature review was to gain an understanding about how Figured Worlds was used in other research studies and what aspects of Figured Worlds were considered important by these studies. Skinner et al (2001) suggest that this can be answered by deciding how much is needed to be known about the world itself and about the personal history of the individual. For this thesis, holistic knowledge about the mechanisms of the WP initiative and a theoretical understanding of not only

individual stories but the multiplicity of the components that shape this initiative is important. As we shall see in subsequent chapters, the data will be explored for improvisation and agency (*e.g.,* pupil selection by school staff) as well as artefact creation and identity development (*e.g.*, through school and campus visits) through interpersonal interaction (*e.g.*, relationship between mentors and mentee pupils) in the Figured World of this Widening Participation initiative.

Chapter 5. Study design and methods

The study of Access to Dentistry (A2D) was a qualitative research study underpinned by a case study methodology and viewed through a Figured Worlds lens. The purpose of the thesis was to understand, in depth and in detail, the perceptions of those involved in this particular WP initiative, to understand what strategies were employed by the WP initiative that would support successful pupil engagement and the initiative's evolution and to advance theoretical knowledge of the wider field of WP. The focus of the research – the unit of analysis – was therefore the bounded case of A2D. The aim of this chapter is to describe the methods employed in the design of the study.

5.1. The research context – the evolving story of A2D

This study was conducted in London, United Kingdom, in a highly selective HEI belonging to the Russell Group of Universities (2013) and in the schools that participated in A2D from 2012 to 2017. The HEI serves a socioeconomically diverse population of inner-city London, offering a variety of subject choices at the undergraduate and postgraduate level. The HEI has a medical and dental school offering both undergraduate and postgraduate degrees in medicine, dentistry and the allied health sciences. In order to fulfil the university's vision to widen participation and as part of the HEI's Access Agreement (reference withheld to preserve anonymity), a long-term, longitudinal initiative, whose focus was on the development of the long-term relationships, for widening participation to dentistry (subsequently also to medicine) was developed by a senior member of academic staff from the HEI's dental school in collaboration with some members of the HEI's WP team; this organising subgroup will hereon be referred to as the Project Core Team. So, at initial conception, the Project Core Team comprised the senior dental school staff member and individuals from the HEI's central WP office. From the second year of the initiative, when the need for a coordinating individual became clear, a WP officer was appointed at the dental school. Since then, there has been a WP officer appointed specifically to coordinate WP activities (including A2D) within the medical and dental school, who is guided by the senior Dental School staff member and supported by the HEI's central WP office. The initiative targets secondary schools,

offering a package of activities designed to raise aspirations and awareness of dentistry (and later, medicine) [7] as career options amongst selected pupils from underrepresented groups. Schools are invited to target approximately eight pupils (nominally four to five each for dentistry and medicine) to participate in the WP initiative. Pupils (targeted in Year 9) are invited annually in Years 8-13 for introductory talks, taster days/activities on HEI campus, school visits by HEI staff and students and peer mentoring. The aim of campus visits is to enable pupils to gain first-hand experience of being HE participants, provide information about the HEI, interact with current HE students and to provide Information, Advice and Guidance (IAG) (Year 11 pupils were initially invited for on-campus activity days, but following difficulties engaging this cohort owing to examination commitments, Year 11 events were discontinued (see section 8.3.2.1, page 202) in Year 4 of A2D and replaced with an extra Year 12 campus visit). School visits were initially designed as introductory talks to recruit schools, to introduce school pupils to A2D, to introduce dentistry as a programme of study and to support school staff in selecting pupils (Year 8 or Year 9) for A2D. However, this activity was modified from year 2 of A2D: firstly, in response to difficulties with engaging HEI staff and dental students for multiple introductory school visits, the introductory talks are now conducted for all Year 8 pupils on campus; secondly, in response to dwindling attendance of some school cohorts at campus visits, some of the tutoring and workshop sessions are conducted as school visits by dental students and Project Core Team. An annual information evening for parents, carers and teachers (dubbed Parents' Event) was added to the programme of activities in the fourth year of the initiative and is held at the HEI (see section 8.3, page 186). E-mentoring is provided for pupils in Years 12 and 13, to support them through the admissions process; this is carried out by dental or medical students with support from the Project Core Team. This was initially devised as face-to-face mentoring for pupils from Years 9-13, but for reasons discussed in subsection 8.3.3, page 204, this strand of the initiative was modified in Year 4 of A2D, when the first cohort of pupils were in Year 12, and e-mentoring was thereafter provided to participating pupils in Years 12 and 13. The

[7] The initiative was first designed for widening participation to dentistry and, in the first two years, schools were asked to select four pupils for participation in A2D. The initiative expanded in the second year to include medicine.

activities and information evenings are conducted by the Project Core Team, assisted by HEI students from the dental (and medical) school. When the initiative was first designed, all undergraduate dental students (each Year cohort comprises approximately 70 students) were expected to participate, by contributing to mentoring in groups of approximately eight students who would also assist with the campus visits and school visits. Dental student participation was compulsory in order to fulfil the then new curriculum module of "teamworking, professionalism and social responsibility" (Project Core Team planning document 2012, p.2; reference withheld to preserve anonymity). However, by the second year of the WP initiative, it became apparent that increasing clinical and academic commitments and, indeed, variable interest in A2D meant that within the student groups, some dental students participated in the activities more than others. Participation in the activities of A2D is now voluntary for the dental and medical students at the HEI. All targeted pupils who complete the longitudinal initiative and meet the HEI's minimum admissions criteria are guaranteed an interview for a place on the undergraduate (dentistry or medicine) course. As the project was newly developed and therefore, necessarily, a continuously evolving one, some targeted partner schools withdrew from the initiative and were replaced by other schools (subsection 7.2.2, page 133). The reasons for withdrawal of schools related mainly to lack of resources in terms of staff time to coordinate the activities of A2D within those schools (see section 7.2.2, 133). On average, each year, seven to eight schools participate in the initiative, although the lack of consistent engagement by some schools continues to be difficult to align with the longitudinal principles of A2D.

The HEI carries out regular evaluation of this initiative, utilising a mix of participant surveys, education destination tracking and qualitative research. This doctoral study forms part of this evaluation strategy (reference withheld to preserve anonymity).

5.2. Sampling strategy: selection, size and timelines

In order to understand the different (and potentially changing) perspectives of the individuals in A2D, I selected individuals to study from all groups of key stakeholders in A2D; because of their particular history and identities these individuals could "purposefully inform an understanding of the research problem and central

phenomenon in the study" (Creswell 2013, p.156). The multiplicity of individual perspectives was gained through purposive sampling (Merriam and Tisdell 2015). It was acknowledged that owing to issues arising from negotiating access to the study participants (section 5.4 and subsection 9.7.2, page 230), some of the sampling, although intended to be purposive, would naturally result in a certain degree of convenience sampling. For example, I interviewed individuals from all groups of key stakeholders, although within those groups, some individuals were more easily accessible than others.

These were the groups of stakeholders that participated in A2D and were invited to participate in the study:

- Year 9 pupils at target schools identified for dentistry in the spring/summer terms of 2013, 2014 and 2015
- WP liaison staff at schools
- Project Core Team staff at the HEI
- Dental students at the HEI

Requests for permission to invite participation in the study by school staff and pupils were sent to six anticipated partner schools (usually to the heads of schools) at the outset of the WP initiative. Of these, four responded with permission for staff and pupils to participate and the other two refused permission. During the early years of A2D, engagement of the WP initiative with schools was challenging, and some schools opted out of the initiative (reasons for which were often cited as lack of resources – FN, 2013). As other schools joined the initiative, further emails inviting participation in my study were sent out. In all, nine schools were contacted; four schools responded with permission for their staff and pupils to participate; two schools responded to refuse permission and two schools did not respond to my emails despite repeated requests. Data from the ninth school comprises field notes from one meeting with a teacher and further email correspondence with her. The heads of the four schools that agreed to participate in my study then communicated my details to the liaison staff members working with A2D. Six staff members from those four schools agreed to participate in the study. Two staff members (both belonging to one of the four schools, and both of

whom were, at the time, working with A2D) declined participation. Two of the six that agreed to participate were interviewed face-to-face (audio recorded) more than once. A teacher from the ninth school who I met at a campus event initially responded to my emails to invite participation, although communications from her subsequently ceased with no apparent reason on her part. Data obtained from this teacher was from our informal interaction during a campus visit (FN, campus visit, 2017). However, I did obtain permission via email to use selected excerpts from our conversation. Table 5 below shows the profile of staff that I interviewed and had informal conversations with. Most were careers coordinators and at a reasonably senior position to ensure sustained and active engagement with A2D. I did not specifically seek information regarding the ages of the school staff since I did believe this to be relevant to the study.

Table 5: Profile of school staff

School code	Staff code	Gender	Role in school	Number of interviews	Other data sources
S1	SS1	Female	Director of learning	1	Email correspondence
S2	SS2	Female	Head of sixth form Biology teacher	1	Informal interaction at school visit, email correspondence
S2	SS3	Female	Pathways in partnerships coordinator Careers advisor	1	Email correspondence
S3	SS4	Female	Careers coordinator	3	Informal interaction at school visit and campus visit, email correspondence
S4	SS5	Female	Assistant head teacher	2	Informal interaction at other WP events, email correspondence
S4	SS6	Female	G&T (Gifted and Talented) coordinator for science	1	Informal interaction at school visit
S5	SS7	Female	Science teacher	0	Informal interaction at campus visit

Having initiated communication with the school liaison staff, I then depended on them to recruit pupils for my study. My only criterion for this group of participants was that the pupils were selected for A2D. In the early years, school staff had a degree of flexibility over who to select for A2D, and therefore, control over who I could recruit for my study. Ease of access to the mentee pupils thus depended on the nature of my relationship with staff at schools, the so-called gatekeepers (section 5.4.1, see also subsection 9.7.2, page 230). n the first three years of the study (2013-2015), I was able to contact and communicate with the teachers to recruit pupils for the study. The position of teachers as gatekeepers also meant that access to these groups of pupils was only possible when the school staff responded to my email requests. For example, a change in staff at one school that was otherwise engaged with my study meant that I no longer had easy access to those pupils despite repeated requests to the new member of staff. Letters of information and letters of consent (for the pupils and parents/guardians) were sent to the pupils through the teachers (see Appendix 6, page 285). Once the teachers had the signed consents to participate, they notified me and, through the teachers, I arranged for a meeting with pupils on their school premises. Apart from one occasion (while still awaiting confirmation of my own child safeguarding certificate), I was able to interview (audio-recorded) pupils in a private room, so as to provide reassurance regarding anonymity and protection of any information they may provide. In all, I interviewed 24 pupils. Table 6 below provides details of the numbers of pupils I interviewed and the school year/dates in which interviews were held.

Table 6: Profile of school pupils

School code	Cohort	Total number of pupils interviewed	Pupil code	Gender	Year (s) in which interviewed
S1	-	0	-	-	-
S2	Cohort 1	3	SP9	Male	Year 10 (2014)
			SP10	Male	Year 10 (2014)
			SP11	Female	Year 11 (2014)
S3	Cohort 1	6	SP1	Male	Year 9 (2013)
			SP2	Male	Year 9 (2013) Year 11 (2015)
			SP3	Female	Year 9 (2013)

					Year 11 (2015)
			SP4	Female	Year 9 (2013) Year 11 (2015)
			SP22	Male	Year 11 (2015)
			SP23	Female	Year 11 (2015)
	Cohort 2	7	SP16	Female	Year 9 (2014)
			SP17	Male	Year 9 (2014)
			SP18	Male	Year 9 (2014)
			SP19	Female	Year 9 (2014)
			SP20	Male	Year 9 (2014)
			SP21	Male	Year 9 (2015)
			SP24	Female	Year 9 (2014)
S4	Cohort 1	4	SP5	Female	Year 9 (2013) Year 10 (2014)
			SP6	Female	Year 9 (2013) Year 10 (2014)
			SP7	Female	Year 9 (2013) Year 10 (2014)
			SP8	Female	Year 9 (2013) Year 10 (2014)
	Cohort 2	4	SP12	Female	Year 9 (2014)
			SP13	Female	Year 9 (2014)
			SP14	Female	Year 9 (2014)
			SP15	Female	Year 9 (2014)
S5	-	0	-	-	-

Similar requests were also sent out to the Project Core Team and to the dental students at the HEI via email (see Appendix 5, page 280, for information leaflets and consent forms for school staff, Project Core Team members and dental students). While all of the Project Core Team responded swiftly and proactively agreed to participate in the study, it was difficult to engage dental students; those that did participate were the ones that were most engaged with the WP initiative. It is interesting to note that those students who participated in my study were also responsible for some of the evolution

of the WP initiative (see section 8.3.1, page 191); other students did not respond to my invitations for the research study despite repeated email requests. The reasons for this limited participation by the dental students could be multiple, including constraints arising as a result of their academic commitments and constraints arising as a result of my researcher position (section 9.7.3, page 231). Summaries of the profiles of participants from the Project Core Team and the dental students follow in Table 7 and Table 8.

Table 7: Profile of Project Core Team

Participant code	Gender	Number of interviews	Year of interview	Other data sources
PCT1	Female	1	2013	Email correspondence
PCT2	Female	1	2014	Email correspondence
PCT3	Male	2	2016 2017	Email correspondence Informal interaction during school/campus visits

Table 8: Profile of dental students

Participant code	Cohort	Gender	Interviews	Year of interview	Other data sources
DS1	Cohort 1	Female	Focus group interviews: 3	2013 2015	Email correspondence
DS2	Cohort 1	Female		2013 2015	Email correspondence
DS3	Cohort 1	Male		2013 2015	Email correspondence
DS4	Cohort 1	Male		2013 2015	Email correspondence
DS5	Cohort 1	Female		2013 2015	Email correspondence
DS6	Cohort 1	Female		2015	Email correspondence
DS7	Cohort 2	Female	Individual interview: 1	2015	Email correspondence

The study timeline was partly dependent upon the schedule of A2D, partly on the academic year cycles which support and restrict school and HEI activities throughout the year, and partly on the part-time nature of my doctoral study, which was limited by my clinical specialist training (see section 5.5). The decision to stop collecting data was also, therefore, influenced by the timing of this clinical training. Data were collected in the academic years 2012-2013 and 2013-2014, the first two years after the launch of A2D, then again in the academic years 2014-2015 and 2016-2017, when the programme had evolved and embedded a little and when longer-term participants had developed insights arising from extended experience. A longitudinal research design was chosen as it enabled insights into these evolving perceptions of the different groups of participants. Thus, the study design contributes, in a small way, to addressing the scarcity of longitudinal studies of evolving WP initiatives and participants' developing perspectives and identities (see section 2.10, page 57).

However, as is evident from Tables 4-7 above, it was not always possible to interview all participants more than once. Thus, by the end of the study, a total of 48 interviews (individual and focus group) had been conducted with the 40 participants. It was not possible to include the final perceptions of the first cohort of school pupils as they graduated from school and from A2D at the end of the 2015-2016 academic year, when I was unable to collect data owing to my clinical training which required me to sit high-stakes professional examinations (see section 5.5 and subsection 9.7.3, page 231).

5.3. Data collection approaches

In order to illuminate the case of A2D as fully as possible, the depth and detail collected about the individuals was as important as the numbers of individuals or sites studied (Creswell 2013). Similarly, it was important to gain insights from other sources of data such as documentary artefacts and observational notes at events and activities that formed A2D (such as campus workshops). Thus data collection for the thesis involved multiple sources of data (Creswell 2013; Merriam and Tisdell 2015); broadly grouped into observation (participant and non-participant), interviews and documentary artefacts. In order to access these sources of data, I chose, as sites of study, the HEI where the majority of WP activities would be conducted as well as the schools. I chose

to access data at schools because, firstly, some WP activities did indeed occur at schools, and secondly, there would be greater likelihood of success in accessing school pupils and school staff in their 'own' environment. I had developed good enough relations with the Project Core Team at the HEI so that they would inform me of upcoming events where I could 'collect' data.

5.3.1. Observation of events and activities

Observation is the act of noting the events in the field, using appropriate tools and employing all five senses of the observer (Creswell 2013). Having negotiated access to the activities of A2D, I aimed to attend as many events as possible, within the constraints of my competing clinical training (see subsection 5.5). As a result of my developing relationships with the Project Core Team as well as with school staff, I was often invited to participate in some of the activities of A2D. My role during these events varied within the observer-participant spectrum, and in order to ensure access to A2D, I was flexible in the degree of my participation as required by the WP initiative. During events and activities, I made notes with thick descriptions, which included the physical setting of the event, the individuals attending, the activities being conducted and the various interactions that I observed; I also made notes on my own reactions and interpretations of these events (Creswell 2013).

Challenges associated with observation relate partly to the logistics of the process, such as: being able to take detailed notes, knowing how to focus the observations to the research question and avoiding being overwhelmed with the information. Other issues arise from the relational aspects of observation; these include: potential deception of the individuals being observed, the role assumed by the observer (participant/nonparticipant), sharing relationships with participants (Creswell 2013), and the effects of familiarity with the research site.

It was not always possible to make detailed notes, particularly when I was an active participant in some activities of A2D. However, wherever possible, I added to those notes later (preferably on the same day). As a qualitative research method, the data gathered from observation (in the form of field notes) were iteratively analysed, and as I began to gain a better grasp of the theoretical underpinning of the study, I was able to

focus the observations to the research question and the theoretical lens. I ensured that my role as a researcher was made explicit to individuals attending the various events and activities in A2D, even when I was a participant in the events. The data from observation were in the form of ethnographic fieldnotes of meetings (including those with supervisors), workshops and talks. The data were constructed through my 'eyes', and as a participant-observer, I was able to gain further insights through my own experience of the phenomena (*i.e.*, the activities) (Ritchie 2003). Delamont (2004) has cautioned that fieldwork in familiar settings risks ignoring some aspects of the setting which may be 'normal' to the researcher but 'strange' or unusual to another observer (like the reader). Particularly when observing activities such as campus visits in the dental school, I attended to this issue that my familiarity with this environment due to my role as a dentist (see section 5.5) might lead to missing aspects of the data that might be crucial to the analysis. For example, when observing the practical workshop activities during campus visits, which are a routine aspect of undergraduate dental training, I might have missed the significance of these activities for the different groups of participants; this significance is discussed in detail in subsection 8.2.2.1, page 172 and subsection 8.2.2.2, page 177). Baszanger and Dodier (2004) suggest, in the context of ethnographic anthropological fieldwork, that it is important for researchers to distance themselves from the familiar environment and achieve "personal proximity" (p.14) with the unfamiliar environment that they are researching. I applied this to my observations in the field, where I, conceptually, distanced myself from the familiar Figured World of dentistry and gained proximity to the Figured World of A2D, which was related to, but not the same as, the Figured World of dentistry. In the case of the practical dental activities, as we shall see in subsection 8.2.2.1, page 172, this then enabled me to explore and understand the differences in the ways that the dental students and school pupils perceived and enacted the artefacts generated.

Thick descriptions in the ethnographic fieldnotes enabled me, as a case-study researcher, to develop insights into the multiple evolving perspectives which were the focus of this research study and, as we shall see in Chapters 6-8, to provide a detailed description of the case and context of A2D.

5.3.2. Interviews

Interviews are conversations between the researcher and study participants with the explicit purpose of answering the research question (Merriam and Tisdell 2015). Broadly, the two main types of individual interview techniques employed in qualitative research (the so-called qualitative interviews) are the unstructured and the semi-structured interviews (Bryman 2004). In order to gain deeper insights into the multiple and evolving perceptions of the individuals in A2D, I conducted interviews with purposively selected (albeit, conveniently available) samples of stakeholders (pupils, teachers/school staff, dental students at the HEI, and Project Core Team members from A2D at the HEI). I was interested in understanding their views on WP and A2D in as rich detail as possible, without being constrained by the script of a semi-structured interview. The natural approach for this thesis, therefore, was that of a lightly structured interview. In order to explore and understand the participant perceptions, I created topic guides (Appendix 7, page 293) to direct research interviews; the open-ended nature of the interview questions allowed the participants to construct their views on A2D and on WP. Epistemologically, this approach to interviewing was aligned to the collaborative social construction of knowledge by the research participants and the researcher (Legard *et al.* 2003). The types of interviews I conducted and the strategies I employed are discussed in the remainder of this subsection.

I conducted individual interviews with pupils, school staff, and Project Core Team members from A2D at the HEI; this enabled me to understand individual attitudes, opinions, beliefs and experiences of these participants (Merriam and Tisdell 2015). Individual interviews were conducted at sites of participants' work or education. The choice of venue was firstly, convenient to all participants and, perhaps more importantly, weakened the perceived position of power that I held as a researcher. In order to facilitate trust with the participants during research interviews (Legard *et al.* 2003), I was sensitive to my language, tone and body language; carefully selected opening subjects to put participants at ease; and assured them of the validity of their responses, of confidentiality and of freedom to end research participation if they so wished. I drew on effective questioning strategies highlighted by Merriam and Tisdell (2015) who suggest that effective research interview questions lead respondents to

provide rich, descriptive data. Some notable strategies are non-directional questions; questions directed at individuals' experiences, emotions, opinions or knowledge; and questions designed to challenge, hypothesise or imagine ideal scenarios; as well as avoiding asking leading questions, multiple questions, or yes/no questions.

In addition to these issues, interviewing adolescent school pupils presented some unique challenges. Of these, a well-recognised challenge is one of power dynamics between the adult researcher and the adolescents being researched (Eder and Fingerson 2002), as children and adolescents are typically positioned as occupying lower status than adults. I will return to this issue in the discussion of my researcher position in section 5.5. Here, I discuss the strategies I employed in an attempt to 'empower' the adolescent pupils. Reciprocity in research relationships is an important means of empowering adult as well as adolescent participants and is discussed in greater detail in subsection 5.4.2; the adolescent participants enacted reciprocity by utilising my researcher status (section 5.5) to obtain information on dentistry or on A2D. Bassett and colleagues (2018) suggest adapting the opening statements (of confidentiality) to informal messages thereby allowing participants to relax. During research interviews, I allowed participants to lead discussions and to raise topics and discourses that were familiar to them, particularly in an attempt to engage reticent adolescents in conversation.

With the dental students, I conducted focus group interviews which enabled insights through group interactions amongst these participants. This allowed participants to listen, reflect and expand their perspectives based on the views of other participants and enabled the emergence of ideas through their social interaction in the interviews (Finch and Lewis 2003). The strategies I employed were similar in some respects to those for individual interviews, although some differences should be highlighted. Finch and Lewis suggest that focus groups go through five stages that trace development of the relationships through participant interaction beginning with guarded responses and progressing through tensions between participants when roles are distributed and negotiated, to settling of group identities, emergence of interactive ideas (which may agree or disagree with one another) and finally the conclusion of the interview. Whilst these stages were largely enacted by the participants, I, as the focus group moderator,

ensured that discussions were controlled to allow for balanced views of all participants and that diversity of opinions was encouraged. It was important to also record non-verbal interactions amongst the participants.

As a novice qualitative researcher, I was apprehensive about my qualitative research interview skills, with the adults and with adolescent participants. I drew upon my previous experience as a clinician and as an admissions panel member. I return to these issues in the context of my researcher position in section 5.5.

5.3.3. Documentary artefacts

Documentary, and other, artefacts, as part of the setting of A2D were naturally occurring sources of data, some of which existed prior to the commencement of this study. These included:

- Minutes of meetings
- Any email communications related to the WP initiative
- Reports produced by the HEI
- Information resources developed for pupils, parents and teachers
- Training resources developed for dental student mentors

I largely followed the same general principles for extracting data from documentary artefacts as for observations and interviews, as described by Merriam and Tisdell (2015). Ensuring authenticity of these documents was vital but was relatively unproblematic as most of the artefacts listed above were generated by the Project Core Team; these were therefore primary sources of data. I was wary of the limitations of this source of data, that is, the possibility of limited utility for research purposes, and the almost certainty that most documents represented the views of only one group of stakeholders – the Project Core Team, because, as a result of the relationships I had established with the Project Core Team, I was able to more easily gain access their some documents than to documents generated by, for example, schools. However, in echoes of the literature (ibid), these artefacts provided a source of data that was independent of my research agenda and closely related to the social context of A2D.

5.4. Negotiation of research relationships, including ethical issues

Qualitative research involves a degree of immersion by the researcher into the research setting and with the research participants (Lewis 2003; Silverman 2005). Thus, the relationships that I, as a researcher, developed with the research participants were of paramount importance to the research process. The following subsections outline the issues of access to participants and the ethical considerations that were raised by the research.

5.4.1. Gaining access to research participants and gatekeepers

Embarking on the research process began with anticipating the ethical challenges and designing the study to respond appropriately. One of the elements of this was gaining access to the research participants. Research ethics committee approval of the planned approach was only the beginning of negotiation of access (Gaztambide-Fernández and Howard 2012). As outlined in section 5.2, I interviewed the following groups of research participants:

- Secondary school pupils
- WP liaison staff at selected secondary schools
- Project Core Team staff at the HEI
- Dental students at the HEI

The challenges faced by researchers include establishing contacts, gaining access to participants and negotiating barriers, both social and cultural (Gaztambide-Fernández and Howard 2012). For example, the Project Core Team at the HEI were not only easy to access owing to our shared professional goal in WP, they often introduced me to school staff members and dental students whom I might not otherwise have been able to contact easily. This insider status and the links I had established with the Project Core Team was therefore the basis for gaining access to other participants. My insider status was thus a resource for me; it was also a reciprocal resource for the research participants (see subsection 5.4.2). Conversely, access to some participants, such as school pupils or

even school staff, was determined firstly, by the variable resources available to schools and secondly, by 'gatekeepers' (such as school heads or other staff such as careers advisors that liaise with WP teams at HEIs). Schools that had the resources to engage fully with WP initiatives like A2D were also able to engage with my research study. Some schools' lack of engagement with A2D not only risked excluding their pupils from accessing WP resources (Waller *et al.* 2015), but also meant that those excluded pupils could not be included in my study. I acknowledge that the data could not fully represent the interests of diverse stakeholders, although the insights from this study may serve the interests of those excluded participants as well as the pupils at the heart of this WP initiative. Even where schools were fully engaged with A2D, the necessity (for me as the researcher) of working through gatekeepers, which was particularly important to mitigate potential concerns in respect of safeguarding school pupils from coercion, generated significant delays at every stage of negotiating access. Whilst the safeguarding benefit of this was paramount, the delays increased the likelihood that opportunities for contribution to the study would be missed, with the result that some participants' voices were not heard. In addition, delays limited the total amount of data collected, perhaps limiting the extent to which data saturation could be reached. Gaining access to these participants was further hampered by changing 'gatekeeper' staff and/or target schools themselves. This is, in itself, an unavoidable ethical concern due to the potential for introducing bias.

5.4.2. Reciprocity

Reciprocity refers to the measures that researchers might take to acknowledge the time, assistance and thought that research participants have given to the study. These measures typically take the form of regular reports, provision of information or small monetary remuneration. Reciprocity may encourage participation and make the research process one of mutual (but not necessarily an equal) exchange (Lewis 2003). For this study, reciprocity towards the school staff and those at the HEI was provided through my participation in A2D events (although I was not responsible for the planning of such events) and at other, unrelated educational events such as careers fairs; furthermore the school pupils and school staff sometimes viewed me as a resource for information, both for professional dentistry related queries and those related to A2D.

5.4.3. Ethical issues

At the start of the study, ethical approval was obtained from the institutional Research Ethics Committee (reference number withheld to preserve anonymity, see Appendix 4: Ethics approval on page 279). Potential participants were given information sheets outlining the project, with time to consider whether they wanted to participate and opportunity to ask questions. Informed, written consent was obtained from all participants, and in the case of participants under the age of 17, from their parents or guardians; continuing, verbal consent was sought before each subsequent interview. All participants (and guardians, in the case of those under the age of 17) were told, in writing, that participation (and any subsequent decision to withdraw) was voluntary and that their decision in relation to the research study would not affect their involvement in A2D. Participants were also given assurances that I, as the researcher, would follow the ethics protocol and make every effort to ensure anonymity and confidentiality during data collection, analysis and preparation of any written material related to the research study.

All data were handled sensitively and in accordance with data protection laws. To this end, all personal information relating to the participants was anonymised and coded. All audio recordings and transcripts, as well as coding keys and any identifiable information relating to the participants or organisations, were stored securely, both physically and digitally, and in locations separate to the remainder of the study documents. Interview transcripts (all anonymous) would be stored securely for seven years following the completion of the research study, as described in the ethics guidelines.

My ethical approach was strengthened by my commitment to the authenticity and flexibility towards the research process and by adopting an ethical researcher position (Macfarlane 2010), including (but not limited to) respect towards participants and other colleagues, maintaining transparency surrounding circumstances of data collection and analysis, ensuring accuracy of representation of findings, acknowledging the intellectual findings of others and demonstrating reflexivity throughout the research process (discussed next; see also section 9.6, page 227 and subsection 9.7.4, page 232).

5.5. Reflexivity in research

Reflexivity in research is about problematising one's position as a researcher (Cousin 2010) and problematising the researcher's views, biases and stance that may have influenced the research design, process, analysis (Snape and Spencer 2003) and presentation of findings. This is reflexively discussed by considering its construction (in keeping with social constructionism), relationships between the researcher and the researched, the effects of those relationships on the information that participants shared with me and the effect of my social position in this research study on my interpretation of the data. The first three considerations – the construction of researcher position, researcher-participant relationships and the effects of those relationships – are discussed next. Considerations related to interpretation of the data, in other words, to the quality of this research study, are discussed in section 9.6, page 227.

As social constructionists, it is vital for researchers to acknowledge that their own position, personal history and perspectives can influence the data analysis and interpretation (Keane 2015). My identity and my position as a researcher were directly influenced by my clinical and postgraduate educational journey. I am a dentist and at the time of the start of the doctoral study, I was training to be a specialist histopathologist in the UK. My experiences as an interviewer for admissions to undergraduate dentistry partly led to the development of this research study, which, although not directly related to my clinical training as a histopathologist, was a negotiated component of my training programme which permitted the integration of doctoral research. In that sense, this research dovetailed with my clinical training.

As a part-time researcher and specialist postgraduate dental trainee, I was cognisant of the importance of balancing my clinical and research commitments; I was also sometimes limited, as a researcher, by the timing of my specialist clinical training and by events such as professional examinations linked to the clinical training. This limitation constrained the timing of data collection and whether or not data from some participants could be obtained. The issues arising as a result of my researcher status are further discussed in subsection 9.7.3, page 231)

As a researcher employing the Figured Worlds theory (Holland *et al.* 1998) which is inspired by the Marxist concepts of structure and positioning, I have to address my social positioning in the research setting as a female, Asian, first-generation immigrant, while emphasising that, as far as I could tell, these indicators of my identity did not have overt impact on my research. Nevertheless, it is possible that people who participated in the research reacted to me in ways that reflected their perceptions of my social and cultural positioning, although there were no overt signs of this. On the other hand, my position as a dentist and my perceived insider position within the HEI was more pertinent to the ways in which the research participants and I, myself, perceived my status and my identity in the research setting, as a practitioner-researcher (Fox *et al.* 2007). These considerations are discussed next.

Gaztambide-Fernández and Howard (2012) suggest that, within the social sciences, researchers are generally positioned 'above' their research subjects, because a lot of social science research is based on understanding the experiences and, possibly thereby, improving the social conditions of underprivileged groups. Exceptions are researchers studying elite groups of individuals, such as members of the judiciary (Nir 2018), national security agencies (Van Puyvelde 2018) or political PR consultants (Lounasmeri 2018), in a process described as "studying up" (Souleles 2018, p.51). In either instance, (whether studying 'up' or studying 'down'), few researchers in the social sciences would position themselves as 'insiders'. Clinician-researchers who undertake social science research within healthcare or health services settings may position themselves as insiders, albeit while acknowledging their perceived position of greater privilege than the research participants. For example, Conneeley (2002), an occupational therapist who embedded herself in her study examining the effect of rehabilitation for patients with severe head injury was cognisant of her greater privilege in relation to her participants. I am similarly conscious that my interpretation and retelling of research participants' narratives may have been influenced to some degree by my professional role as a dentist and as undergraduate admissions interviewer and that these interpretations were an amalgamation of my practitioner-researcher role.

The status of a researcher is a dynamic, fluid entity, dependent on complex relationships and constructed through the progressive negotiations of the researcher position (Cousin

2010; Gaztambide-Fernández and Howard 2012). Silverman (2005) argues that the relations with research participants may help to give further access to data in different contexts. Drawing on these observations, I reflected on my own complex status as a researcher as it was constructed through the numerous interactions and relationships that I developed with my study participants. All research participants were naturally made aware of my professional role as a dentist and of my relatively close involvement with A2D. My professional status and dual role as a researcher and clinician-practitioner meant that there could have been influences on the study data and the evolution of A2D arising from my relationship with research participants, such as the way they perceived me and the information they might choose to give me. Further, my professional role may have affected their decision to participate in my study. Some may have perceived an opportunity for increased support as a result of participating. For example, a school careers coordinator successfully invited me to participate in (unrelated) school careers events. The influence of this professional role in influencing my status as an insider is discussed next.

With certain groups of participants, for example, the school pupils, I was concerned that my position as a researcher would be 'above' my research participants. As is the norm (Lewis 2003), I made my professional position (including my close association with A2D) explicitly clear to all research participants, in all written documents (such as the information sheet) and during research interviews. I also invited questions from all participants at the end of every research interview. As a clinician with close professional ties to the dental school that organised A2D, I had greater knowledge of the Figured Worlds of contemporary HE and undergraduate dental education in England (even though my own undergraduate education was completed in India) than the pupils participating in this study. I was aware of this position of greater privilege and anticipated that the school pupils would consider me an 'insider', either as part of the A2D Project Core Team, or at least peripherally involved in the activities of A2D. This was further reiterated in their minds by the fact that, on occasion, I did participate in events and activities in A2D, such as helping out with campus visit workshop activities. Hence, some of the questions concerned the practical organisation of A2D. Other questions related to my own previous experiences as a dental student or as a healthcare

professional. In that sense, my positioning by the research participants was as a significant figure in the Figured World of A2D. For example, at the end of an interview with a school pupil, when I asked if she had any questions for me, she proceeded to ask me about university life and about my reasons for pursuing dentistry.

> "How did you know… you wanted to do dentistry? ... How was university like, when you were trying to do dentistry, and how was the work?" (SP5 S4 C1 Year 9, Yr1 Int, 2013)

Whilst this excerpt is an example of my status as a resource for the pupils (see section 3.4.5 for artefacts in Figured Worlds and section 6.3 on page 121 for artefacts in the Figured World of A2D), a potential consequence of my professional and researcher status was that some pupils may have hesitated to open up to me, despite my assurances regarding confidentiality, thereby positioning me as an 'outsider'. In keeping with the reflexive stance, it is important to avoid deterministic assumptions of participants' identities and behaviour: for example, pupils' perceived reticence towards me might be affected by other, relatively banal factors such as tiredness or social awkwardness. By reflexively acknowledging the fluid, negotiated identities of the researcher and the researched and by prolonged immersion in the field, that is, by repeated interactions with many of the research participants, I was able to facilitate relationships of greater trust.

My identity as an 'insider' was foregrounded while interacting with WP staff at the HEI or with the dental students. This was, at least partly, due to my professional role as a dentist and as a specialist clinician (in training), which led to the formation of shared cultural understandings (such as of discourses surrounding admission to dentistry or of the rigours of the course itself). Furthermore, the doctoral study was positioned within the HEI's evaluation strategy (see section 5.1). This insider status meant not only that I was asked to, but that I proactively offered to, help with activities in A2D. As a dentist with a small role within the HEI (in undergraduate admissions interviews and providing a part of the HEI's formal evaluation of A2D) I had a position of greater privilege than the dental students. This, together with our shared cultural understandings of dentistry and even A2D meant that during a Focus Group interview, when the dental students expressed a wish to contribute to modifying school visits, I encouraged them to pursue

this further with the Project Core Team. I was, therefore, responsible for influencing some of the evolutions in the WP initiative in minor ways (see subsection 8.3.1.2, page 192). I was reflexive about my influence on A2D and on the findings by noting this and other events as they occurred. The research journal provided a focus for ongoing reflection and for prompting careful checking of my interpretations.

These relationships with different participants described above, and the resultant reciprocity of these relationships was instrumental (for me) in gaining better and prolonged access to certain groups of participants (see subsection 5.4.2). The reciprocity enabled me to address the power dynamics between the researcher and the researched. In some ways I was positioned 'below' the participants, in the sense that the power to participate in the research rested with them. If they declined participation, it would adversely affect my doctoral study. The reciprocity further enabled me to 'give back' to those that I was researching, in the form of information or time.

As a novice qualitative researcher, I considered my apprehensions about the research interviews. I drew on my healthcare practitioner experience, of empathetic conversation with patients, and on my experiences as an interviewer for undergraduate dentistry (which typically involves drawing out information from young people aged 17 years). This experience was helpful during interviews with research participants (see section 5.3.2 on page 105). Formulating topic guides to structure the research interviews, helped overcome some limitations arising from my relative inexperience with qualitative research interviewing.

In summary, my researcher position influenced this research study from study design to the findings themselves and the interpretation of findings. In turn, my researcher position, in its multiple negotiated forms, was shaped by my past experience and by my interactions within the worlds of clinical specialist training and of the WP initiative. I will return to this in subsection 9.7.3, page 231, after the study findings have been presented.

5.6. Data analysis

Analysis and interpretation of research data requires clear thinking and skill on the part of the researcher. The approach to data analysis is guided by the epistemological stance as well as the theoretical lens informing the research and is firmly grounded in the research question(s). A researcher also needs to be aware that there is a multidirectional and dynamic relationship between study design, data analysis and theory – a process known as iterative analysis (Lewis 2003). As a qualitative case study, this thesis was concerned with providing a detailed description of the case and its context (Creswell 2013). This section describes the approaches to data management and analysis.

Interviews were audio-recorded using Voice Record (commercially available recording application) and transcribed using ExpressScribe Pro (commercially available transcription software). Interview transcripts were labelled with the date of interviews and the unique identifier codes assigned to each participant (section 5.2). The anonymised transcripts, together with field notes, documentary artefacts and email conversations (related to A2D) were uploaded to NVivo (qualitative data analysis software) for coding and categorisation (see Appendix 8, page 300 for a sample list of codes and Appendix 9, page 302 for a sample list of categories).

In order to gain an understanding of the activities; stakeholders' perspectives and the multiple interactions in A2D, the data were repeatedly read to familiarise myself and develop early codes (as well as sub-codes) and themes. The reflexive thematic analysis approach described by Braun and Clarke (2019a; 2019b) provided a useful framework for reflecting on and discussing the approaches to coding that I employed for this study. Most of the coding was *deductive*, informed by key concepts in the literature (*e.g.*, aspiration, social capital, targeting), from the themes raised in the topic guides (*e.g.*, perception of HE, understanding of WP) and from key concepts of the Figured Worlds framework (*e.g.,* improvisation, identity, salience). I also developed *latent* codes in relation to significant events in A2D (*e.g.*, school visit, campus visit, peer mentoring), which reflected assumptions that activities were central to recruitment into the Figured World. However, I was alert to other ideas which were introduced to my thinking by the data and these were coded *inductively* (*e.g.*, no clear guidance on targeting, opportunity,

persuasion). These initial (provisional) codes were brought together and developed further through my constructionist interpretation whereby I sought to produce meanings and interpretations and theorise the sociocultural contexts in which those interpretations were generated. The next stage of coding was guided by the approach for qualitative case studies advocated by Stake (1995):

- Direct interpretation or Categorical Aggregation: The researcher either draws meaning (interpretation) from a single instance or infers meaning from an aggregate of multiple instances.
- Patterns and correspondence: The researcher looks across categories for correspondence, *i.e.*, consistencies or contractions.
- Naturalistic generalisations: These are assertions made by the researcher and presented to the reader.

An example will help to demonstrate this approach.

In Chapter 7, we will examine the different interpretations and approaches directed at targeting by the HEI Project Core Team and by school staff. The raw data were explored for instances of targeting by school staff members. Upon the initial reading and re-reading of the data, inductive codes were generated and focused on school staff members' perceptions related to targeting, *e.g.*, 'persuasion', 'opportunity', 'guidance'. Deductive codes included 'improvisation', 'history-in-person', 'identity', 'WP background', etc. These codes or instances of targeting were then combined into categories through a process known as *categorical aggregation*, whereby multiple instances of a category are sought (*e.g.*, improvisation in targeting by school staff). The different categories of improvisation in targeting (*e.g.*, improvisation in targeting by school staff, improvisation in targeting by HEI Project Core Team) were then analysed for *patterns*. In the case of improvisation in targeting, this resulted in an understanding of the strategies employed by the different groups of individuals. The final step in the analytical process, explains Stake, is what he refers to as *naturalistic generalisation*. These assertions made by the researcher and presented to the reader, when combined with the rich description of the case, can help the reader to determine whether or not

it is possible to apply the findings to other contexts (Baxter and Jack 2008). This process of analysis is depicted in Figure 8 below.

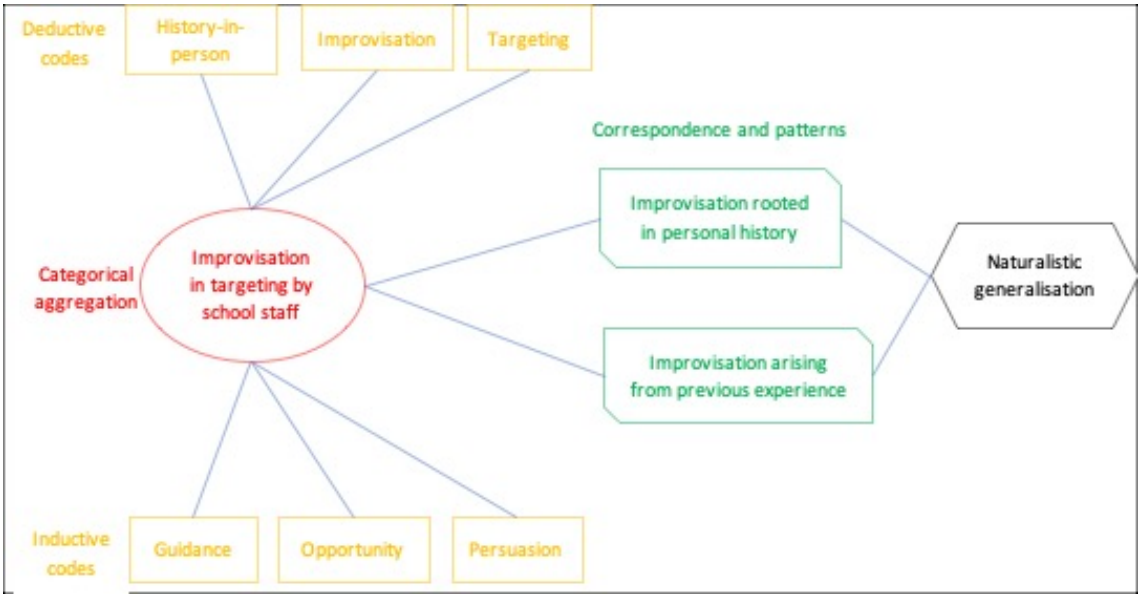

Figure 8: Depiction of the process of analysis

As discussed earlier in this section, analysis was carried out through a combination of inductive and deductive reasoning. There was, understandably, some variation in the degree to which inductive and deductive approaches were developed throughout the data. This variation is therefore reflected in the findings. Thus, in Chapter 6, which introduces the analytical concepts of Figured Worlds through pertinent examples in the data, the analysis was largely developed through a deductive reasoning approach. On the other hand, the findings in Chapters 7 and 8 are developed from a hybrid of both, inductive and deductive approaches.

As the single researcher, I carried out the iterative data analysis. However, the analysis was not linear in the way that is described in the paragraph above. The data analysis was supported by my research supervisors who provided regular inputs on my analysis. These discussions were particularly valuable for challenging my assumptions, so that I could revisit the data, recategorize the findings and refine the analysis in a cyclical pattern until key themes emerged from the findings. The categories and themes form the basis of the structure of the findings and are discussed in Chapters 6-8.

Chapter 6. Access to Dentistry as a Figured World

6.1. Introduction (and background)

The purpose of this research study was to develop an in-depth understanding of a particular WP initiative (Access to Dentistry-A2D) in order to understand what strategies were employed by the WP initiative that would support successful pupil engagement and evolution of the initiative and to advance theoretical knowledge in the wider field of WP. As described in section 3.4, Figured Worlds (Holland *et al.* 1998) are socially constructed cultural worlds into which individuals or participants are recruited because of their particular history; they are worlds that mediate participants' behaviour, allow identity development through improvisation and agency and give meaning to certain actions, discourses and artefacts. The perpetuation of Figured Worlds depends on the interactions amongst the people inhabiting these worlds. The Figured World of A2D was created by the Project Core Team at the HEI. Schools were then recruited into the Figured World and school staff and pupils were introduced to A2D; this was followed by the recruitment of dental students. The interactions and activities of A2D enabled the evolution and perpetuation of the Figured World. These interactions and activities will be explored in depth through the lens of Figured Worlds to reveal improvisation, agency, identity development, artefacts and interpersonal interaction. An initial inductive approach towards data gathering and analysis was followed by a theory-led analytical approach leading to refinement of data analysis (section 5.6, page 116).

The findings (Chapters 6-8) are laid out in the following way: In the remainder of this chapter, pertinent examples from the data are used to briefly introduce improvisation (section 6.2), artefacts (section 6.3), agency and identity development (section 6.4), interpersonal interaction (section 6.5) and multiple Figured Worlds (section 6.6). The concluding section (section 6.7) provides a diagrammatic overview of the Figured World of A2D and its activities, with the interactions with other Figured Worlds inhabited by the participants. This approach offers the benefit of illustrating the concepts of the Figured Worlds theory separately for clarity, while acknowledging these concepts cannot occur entirely in isolation (discussed in section 3.4.3 on page 67). In Chapters 7

and 8, we shall see how the analytical concepts of the Figured World of A2D interact with one another, and how individuals interact with their multiple Figured Worlds through these analytical concepts and ensure the perpetuation of the Figured World of A2D.

6.2. Improvisation in the Figured World of A2D

Improvisation is an individual's behaviour in response to a set of (sometimes conflicting) circumstances in a Figured World. Improvisations occur when one's previous experiences, one's "history-in-person" (Holland *et al.* 1998, p.18), meet with present conditions in day-to-day activity. Improvisations may lead to the production of artefacts (see section 3.4.5, page 71 and section 6.3). These artefacts and the behaviour that leads to their production (*i.e.*, improvisation) can also symbolically mediate the formation, change or preservation of one's identity (see section 6.4).

Dental students were recruited to the Figured World of A2D to help with the activities of A2D and as mentors for targeted pupils. The dental students were novices in relation to this Figured World and needed to work out their actions within this world. They had attended a briefing session with a member of the Project Core Team and were given information via email regarding A2D, which provided guidance but could not set out precise details of how to enter the Figured World and perform the roles of dental student role model and mentor: social interactions are far too complex for an exhaustive instruction manual. People entering new Figured Worlds build upon past experiences in other Figured Worlds and improvise responses to the conditions of the Figured World they are trying to enter. In this study some dental students had some experience of mentoring from other Figured Worlds (such as mentoring younger children during secondary school). Drawing on their previous experiences, their beliefs and their ideas, the dental students interacted with the school pupils in order to engage with them. When initial interactions yielded little engagement among the school pupils the dental student mentors began to improvise, as is evident from the excerpt below:

> "I realised how I had to change how I'd speak to different ones, like some of them you had to speak differently to get through to them in a different way… especially the boys… you have to joke around with them (all agree

> and laugh). If you're serious with them, they don't listen to anything you say. Whereas if you say it, not so seriously, then they actually pay attention, and respond rather than just do nothing. So, I got a lot out of it actually, [because] I hadn't thought about that." (DS4 C1 Year 1, Yr1 FG, 2013)

The dental student mentors hoped that such informal conversations would provide a backdrop for engaging the mentee pupils with the programme and for continued interaction between the mentors and mentees. Adaptation of communication style had not been discussed with the dental students, yet, when faced with the challenge of seemingly disinterested mentee pupils, the dental students had improvised and responded through more empathetic conversation. The improvisation had led to the creation of an artefact: a way of communicating with different groups of people (see section 6.3 below). Many other examples of improvisation were captured in the data corpus focusing on, for example, the Project Core Team's stance on targeting (section 7.2, page 131), targeting of pupils by school staff (section 7.3, 141) and dental students' identity formation as ambassadors (section 8.2.1, page 166).

6.3. Artefacts in the Figured World of A2D

Artefacts are cultural resources within a Figured World (discussed in section 3.4.5 on page 71). They may be tangible, such as an information booklet, or notional, such as ideas arising from an on-campus visit or workshop. Objects, events, discourses or even other people (in their particular roles) can be artefacts. Artefacts may be the products of improvisation and the various interactions in a Figured World (section 6.5). Artefacts may also be appropriated from other Figured Worlds and gain significance (for example, poker chips are significant for their association with sobriety in in the Figured World of Alcoholics Anonymous (Holland *et al.* 1998)), which is different to the significance of poker chips in the Figured World of gambling). Artefacts are mediating tools of agency and identity development (for example, during careers fairs organised by schools, the discourses and information leaflets are artefacts (notional and tangible, respectively) that may mediate pupils' subsequent actions and identities in respect of HE participation).

In the example described in section 6.2 above, the dental student had successfully improvised during his interaction with school pupils, perhaps by drawing on previous experiences with young people, like another dental student who had previously "done volunteering with disabled kids" (DS3 C1 Year 1, Yr1 FG, 2013), and appropriating those experiences as notional artefacts in the Figured World of A2D. Furthermore (and nevertheless), perhaps inadvertently, and certainly not having planned for it, the dental student's improvisation led to the creation of another notional artefact – greater expertise in communicating with different groups of people:

> "I'll be more confident when it comes to having like, children patients, because I know that I can talk to them." (DS4 C1 Year 1, Yr1 FG, 2013)

The dental students recognised that this improvisation gave them an approach (notional artefact) they could appropriate for use in other Figured Worlds such as the Figured World of clinical dentistry (see also subsection 8.2.2.2, page 180).

Participants assign meaning to artefacts, which then gain significance in that Figured World. Artefacts are thus symbolic within a Figured World; only those that are significant to the participants exist within that world and the same artefact may be significant in different ways to different groups of participants. The following quote will help to illustrate this concept. During the third year of A2D, a new WP officer was recruited to the Project Core Team. Upon interaction with the Figured World of A2D, he encountered circumstances that appeared to be conflicting with, and problematic for, the goals of A2D. He responded to the situation by introducing changes to the organisation of A2D, which included the creation of tangible and notional artefacts:

> "…I think that there seemed to be a bit of a drop-off with the original cohort, and certainly with some schools that were not necessarily umm, bringing the same students back. So, I think it was, which kind of made me think, that actually we really need to kind of pull it together as one programme […] like we're having [information] folders that will, that the students will get, and they can add to, over the course of the programme, so they've got like an information resource, trying to engage parents, and teachers, so having a parents' event. Whether, how successful [it will be],

> we won't know yet, but it's certainly something to try and work on." (PCT3, Yr3 Int, 2015)

This member of the Project Core Team recognised issues such as variable pupil attendance as problematic for the evolution of A2D and responded by creating artefacts – both, tangible (information folders) and notional (discussions at parents' events). The meaning and significance attached to these artefacts was different for different groups of participants. For the pupils, the information folders – as tangible artefacts – would serve as an information resource when interacting with the Figured World of A2D, or to help them explain their involvement with A2D in other Figured Worlds, such as those of school, peers, or home. These artefacts could even gain significance in other Figured Worlds, such as that of HE admissions. The intersection between Figured Worlds is discussed in section 6.6. For parents, and indeed the pupils themselves, the parents' events and the discussions arising from such events might be appropriated in the form of information and knowledge, *i.e.*, notional artefacts, so that they might better engage with A2D and with HE. For the Project Core Team, the appropriation of these artefacts by the pupils and their parents would fulfil the aim of allowing the successful evolution of A2D, by improving consistency of engagement of schools, pupils and parents. In that sense, the Project Core Team ascribed a different meaning to the artefacts described above – the concept of creating information folders and organising parents' information evenings – and the significance of these artefacts for the Project Core Team was in their ability to enable perpetuation of this Figured World.

6.4. Identity development in the Figured World of A2D

Identity, according to Holland and colleagues (1998) is how we describe ourselves to others and to ourselves, and then act according to the way we describe ourselves. Most school staff involved with A2D were involved in career advisory roles within their schools (see Table 5, page 98), providing guidance on subject choices, future education options and career pathways. While some staff were exclusively employed in this role, some were subject teachers who undertook this in addition to their regular teaching roles. One member of staff from a participating school described herself to me at our first meeting:

> "I've got a very long job title, but I'm basically the careers co-ordinator for the school." (SS4 S3, Yr1 Int, 2013)

Identities formed previously, the so-called "history-in-person" (Holland *et al.*, p.18), may be taken up as subject positions within Figured Worlds. In the Figured World of secondary school, this individual had been positioned in a particular role, that of a careers co-ordinator. As a result of this identity, she had been recruited into the Figured World of A2D and positioned in a particular role in that world, *i.e.*, co-ordinator for A2D linking pupils with the HEI.

In Figured Worlds, people are continuously engaged in identity formation, and developing "self-understandings" (Holland *et al.*, p.4), when they interact with, and attach significance to, a Figured World. The excerpt below shows the identity formation of a pupil as she interacted with the Figured World of A2D.

> "Initially, around Year 9 or even prior to that, I was probably more set on medicine before dentistry. The idea of dentistry didn't really interest me at that time but going to it [A2D campus workshop] and seeing what you would actually learn and how you would develop your skills and stuff, it's actually interested me more." (SP4 S3 C1 Year 11, Yr3 Int, 2015]

Identities are formed during day-to-day activities, via improvisation and through cultural resources that have meaning in the Figured World (*i.e.,* artefacts (see section 6.3, above)). Identities form the basis for future behaviour and agency. So, by engaging with the Figured World of A2D, this pupil had developed a greater interest in dentistry than medicine; in other words, through the activities of A2D the pupil was forming an identity as a potential dental student and future dentist.

When individuals interact with other individuals in a Figured World (see interpersonal interaction in section 6.5 next), they also confer subject positions (or identities) upon one another; it is then up to the individuals to accept or reject these subject positionings by other individuals, thereby exercising agency. In the quote below, a Year 3 dental student reflected on her experiences at a school visit, during a question-and-answer session between pupils and dental students.

> "I think like one of the schools there was a boy that kept asking me lots of questions […] I probably was bad, but I felt like I was just talking to him, because I could clearly see that this was something that he wanted to do, and we could actually have a conversation and get somewhere and the others were just kind of like sitting there, and they weren't really giving much of what they wanted to do and that kind of thing. Maybe they were quiet and shy and reluctant to talk, and maybe he did [over]shadow them a wee bit, but because he was talking, I think it gives you kind of like a platform to discuss things, if you're interested in it, because you've got something in common, and you kind of had the experience that they are looking for, so you can kind of give your opinion and then discuss things as well." (DS7 C1 Year 3, Yr3 FG, 2015)

The dental student noted that one pupil was asking her a lot of questions, possibly to the detriment of other pupils, which compelled her to interact more with him than the others. Through this interaction, the pupil had positioned the dental student as an 'expert' in dentistry and as a guide or mentor. By accepting this subject position (and hence identity), the dental student had authored her identity (Bakhtin *et al.* 1981) as a mentor (albeit a novice one). Arguably, the dental student also noted that the interactions on this occasion had been less than ideal; as she noted that she "probably was bad". An experienced mentor would draw quiet people into the discussion. By focusing her interaction on the one pupil, the dental student had also positioned all the pupils as either active mentees or as passive bystanders. It would, in a similar manner, be up to the pupils to accept or reject this positioning (see subsection 8.2.1, page 166).

6.5. Interpersonal interaction

A Figured World is a socially constructed world, and its perpetuation depends upon the interpersonal interaction amongst its participants. This analytical aspect of a Figured World is important because the shared social creation and recreation of the world allows participants to attach salience (subsection 3.4.7, page 73) to that Figured World, is the basis for improvisation, leads to creation of artefacts and, eventually, shapes individual identities (as described in section 6.4, above).

The dental students and pupils who entered the Figured World of A2D were novices to this world and might have been uncertain of their role in this world. We have seen in section 6.2, on page 120, how some dental students successfully navigated this interaction, despite being inexperienced with A2D.

The pupils valued the interpersonal interaction with the dental students; this is described by a pupil reflecting on her meeting with them:

> "Researcher: Do you remember what you spoke about to them [about]?
>
> Pupil (SP16): Umm, (pauses to think), I think I asked her how many years you have to study and stuff, and what degrees you need, how long you have to be in uni to be able to like, become qualified" (SP16 S3 C1 Year 11, Yr3 Int, 2015)

In a Figured World, the interpersonal interaction between its participants is instrumental in the evolution of their identities. Conversely, the identities that individuals bring with them into a Figured World can shape the interpersonal interaction. This pupil's identity within the Figured World of school ("my science teacher said that [I would] get good grades in science" "I am interested in dentistry"; attributes that were used to recruit pupils for A2D) had been instrumental in her recruitment into A2D (see targeting of pupils in Chapter 7). She then recognised the significance of this interaction with the dental students, employed her agency to ask what she perceived to be useful questions and appropriated this information as a notional artefact, *i.e.,* information about university life. The dental students too recognised the significance of their interaction with the pupils in shaping their identities in the Figured Worlds of clinical practice (see section 6.2, page 120). As theorised by Holland and colleagues (1998), this seemingly mundane interaction was greatly symbolic for both, the pupils and the dental students. Each appropriated these meetings as notional artefacts that could be used in this or other Figured Worlds: the dental students developed enhanced communication skills which would be useful in clinical dentistry, while the school pupil appropriated information about university life that might shape her future decisions regarding HE.

6.6. The multiplicity of the Figured Worlds of A2D and other Figured Worlds

Figured Worlds cannot exist in isolation. At any given time, there may be multiple Figured Worlds interacting with one another and social interactions within one Figured World may stem from interpretations within another Figured World. Experiences in other Figured Worlds may form the basis for improvisation between Figured Worlds; and may also be the driver for the creation of new identities. Individuals may bring into Figured Worlds, artefacts, identities and experiences that were created in other Figured Worlds and which shape the different Figured Worlds.

We have seen instances earlier in this chapter of the interaction between multiple Figured Worlds that the participants of A2D inhabited. For example, in section 6.2, the dental students improvised their communication strategy with the pupils in A2D and appropriated this interaction to develop greater expertise in communicating with patients in the Figured World of clinical dentistry. So, an experience in the Figured World of A2D had the potential to shape the identities of dental students in the Figured World of clinical dentistry.

We will see an example of interactions in one Figured World shaping the experience of an individual in two other Figured Worlds (section 7.4, page 155): the interaction between a teacher and a reticent pupil in the Figured World of school to persuade the pupil to participate in the Figured World of A2D may have provided the impetus for the pupil to consider the Figured World of HE, which might otherwise be inaccessible to the pupil.

And then, there will be the example of an artefact created in one Figured World holding different significance for the same individuals in different Figured Worlds and different significance for different individuals in the same Figured World (subsection 8.2.2.2, page 183): a silicone dental impression is significant as a clinical skill for dental students in the Figured World of dentistry, but, as an activity, represented a means to ‘break the ice’ with the school pupils in the Figured World of A2D. On the other hand, the same activity was appropriated by the school pupils participating in A2D as information about the undergraduate dental course.

Other examples of multiple Figured Worlds are highlighted through the findings in Chapters 7 and 8. The Figured World of A2D was a powerful element of the cultural lives of the participants of A2D – the Project Core Team, the dental students, the school staff and the school pupils. However, it existed in relation to other Figured Worlds, *e.g.*, home, school, undergraduate dental education, the HEI, WP policy, etc. All such worlds were subject to the cultural norms, the social identifications and to the people that normally participated in them and these worlds therefore influenced the interpretations of the participants in A2D.

6.7. Summary

Figured Worlds have particular norms and conventions, with significance attached to certain individuals and to certain activities. Figured Worlds serve as a frame of meaning for understanding the ways in which individuals negotiate these social interactions and construct identities. The analytical concepts of Figured Worlds, described in section 3.4, have been introduced through selected data from A2D and are diagrammatically represented as in Figure 9. This diagram develops further on the basic premise of how WP is conceptualised in the literature, which was outlined in Figure 6, page 42. The WP initiative of A2D (blue circle), the HEI (blue square box) which encompasses the dental school (green square box) and the partner schools (represented by one orange square box) can be seen as multiple intersecting Figured Worlds. The principal activities enacted in A2D of WP initiatives are indicated in a black box. The dental students and school pupils interact with one another in the Figured World of A2D and with other individuals (school staff, HEI staff) in the intersecting Figured Worlds. There are factors (such as academic activities at school or HE; social circumstances, etc.) shaping their interaction in this and their other Figured Worlds, and which are shaped by their interactions. The general aims of A2D are depicted in the cloud on the right and the mechanisms by which these aims are addressed and by which the participants interact with A2D and with one another – the analytical concepts of Figured Worlds – are depicted in the black rectangle on the right.

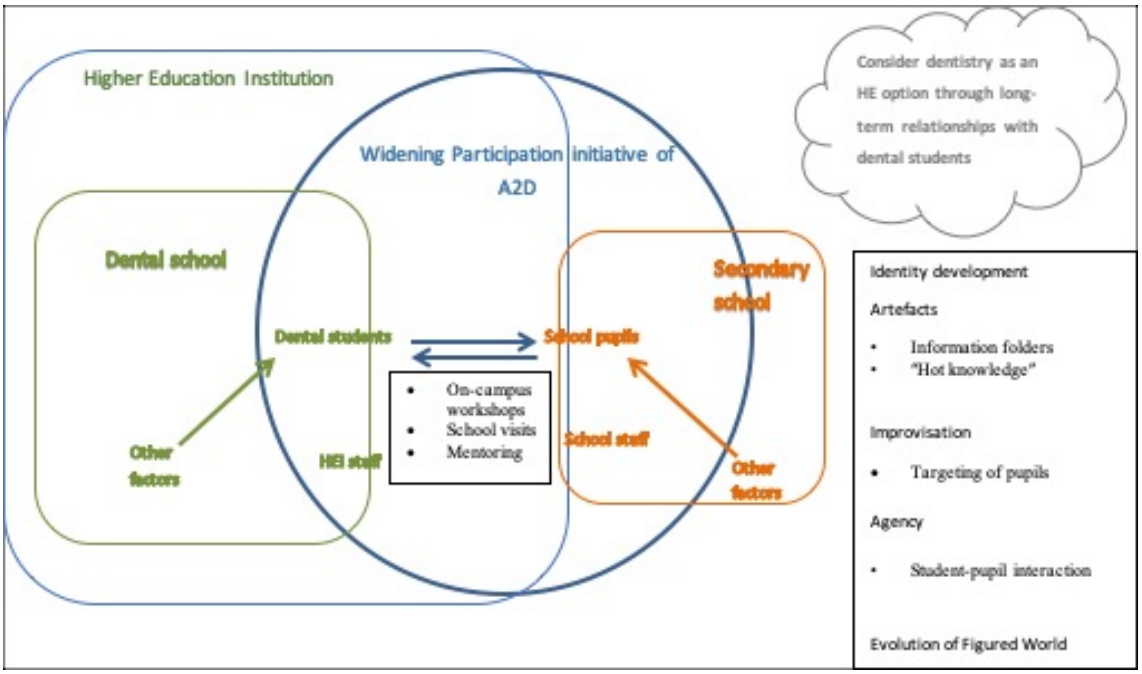

Figure 9: Figured Worlds of A2D, the HEI and school

As a WP initiative, the case of A2D with its distinct norms, wide-ranging activities and diverse groups of participants was well-suited to be explored through a Figured Worlds lens. In order to address the research questions (section 2.12, page 61) and focusing on this particular WP initiative (A2D), attention was directed to the theoretical insights that a Figured World perspective and a case study approach could provide to this doctoral thesis. Selected thematic components of A2D were explored, including targeting of pupils for WP, school and campus visits and peer mentoring. These are described and analysed next, in Chapters 7 and 8.

Chapter 7. Targeting in the Figured World of A2D: Evolving participant perspectives

7.1. Introduction

Targeting has been described as the means by which individuals are identified and selected for WP initiatives; the individuals are typically young people that might not progress to HE without the help of such initiatives (see also section 2.9 on page 51). The terms 'targeting' and 'selecting' are used interchangeably in the literature and indeed, by my research participants. For the purpose of clarity and consistency, 'targeting' will be the term used in the prose of the thesis apart from quotations, where the original term will be used.

A pertinent question that arose during the first year of A2D related to how school pupils were targeted for WP initiatives such as A2D. In response to concerns raised by school staff (discussed in subsection 7.3.1, page 141), the research evolved so that subsequent data collection was aimed at exploring participants' evolving insights into the subject of targeting for WP (see research question on page 61). This was accompanied by a more detailed review of the literature for targeting in WP (see section 2.9, page 51). The Figured World lens focused attention towards the improvisations carried out by the HEI staff, the school staff and, indeed, the pupils themselves. At least partly as a result of these improvisations, the targeting of pupils for A2D also evolved. The lens of Figured Worlds also directed attention towards other analytical concepts, such as identity, agency, artefact creation and interpersonal interaction, described in section 3.4, through the data arising from targeting. To help the reader recall the theoretical concepts described in Chapter 3 and illustrated in Chapter 6, appropriate references to the relevant sections will be provided, particularly in the first few sections of this chapter and of Chapter 8.

7.2. The Project Core Team's stance

7.2.1. Initial conception of targeting: "we actually took care of identifying and then contacting schools"

The purpose of A2D was to support academically able school pupils from disadvantaged backgrounds to consider and explore dentistry as a career choice through the provision of activities designed to encourage HE participation in the form of long-term guidance by dental or medical students and HEI staff to help prepare for applying to study at HEI. Underpinned by these broad guidelines, the Project Core Team (which, at this stage, comprised the central WP office at the HEI and the senior staff member from the dental school) made a pragmatic decision to work with schools that the HEI's WP office had previously established links with as a result of other WP activities.

> "[…] part of the setting up of the scheme was deciding which [schools should be involved], how many schools should be involved, […] because we [the HEI] have the links, so we identified […] oh it turned out to be eight in the end […] secondary schools, and a number of their feeder primary schools that we thought would fit the scheme well and that they were selected by their cohorts, so they've all had, um, high percentage of children on free school meals, a high percentage of students from low, what we call a low participation neighbourhood, from low income families […] to help inspire them to consider dentistry. Um, and also schools that we knew would work with us, so we helped, well we really led on identifying those and we brokered the, um, we actually brokered the introductions […] So, that was our contribution to this scheme, if you like, we [the central WP office] actually took care of identifying and then contacting schools." (PCT1, Yr1 Int, 2013)

This description demonstrates how some groups of participants were recruited into A2D. The previously established links with schools meant that these same schools were being targeted for this long-term initiative. Of course, it would seem from the quote above that the HEI was following, at least partly, published guidelines on the characteristics of schools to be targeted for WP (such as serving large numbers of pupils

on “free school meals”, from “low participation neighbourhood[s]” or belonging to “low income families”). Participants in a Figured World actively respond to a situation (in the form of improvisation; see subsection 3.4.4, page 70 and section 6.2, page 120), by drawing on available cultural resources (or artefacts) (see subsection 3.4.4, page 70 and section 6.2, page 120). The Project Core Team had developed certain relationships with certain schools through participation in other activities (some of which may have been for WP) and appropriated the existing relationship with schools as an artefact (subsection 3.4.5, page 71 and section 6.3, page 121) for the Figured World of A2D; in doing so, the Project Core Team had improvised by taking the pragmatic decision to initially recruiting the most easily accessible schools in the hope of enabling successful launch of the Figured World of A2D. This improvisation was aligned to one of the key principles behind the WP initiative – that of long-term engagement by schools; this guided the actions of the Project Core Team in regard to targeting (this chapter), school visits, campus visits and mentoring (Chapter 8). The implications of such improvisations on WP initiatives in general are discussed in section 7.5. As the WP initiative evolved, and when some of the early schools failed to engage with A2D, other schools were targeted through email correspondence and personal visits by the Project Core Team (see section 7.2.2).

As a Figured World, A2D was culturally created in the setting of a prescriptive backdrop of the HEI’s WP requirements, which in turn were constrained by national frameworks and the political agenda at the time. This included the introduction of substantial increases to HE fees (see page 30 in section 2.5) and resulted in varying enactment of WP policy by HEIs. For the HEI in this research study, the politically driven institutional policy drove the launch of A2D, which was aligned to the fee rise. This potentially slightly premature launch may have contributed, in part, to some of the initial challenges faced by the WP initiative in respect of targeting and in respect of organisation of the principal A2D activities (see section 8.2, page 164). The initial planning document briefly outlined the anticipated characteristics of the targeted pupils: those that were interested in dentistry and had the academic potential to study it successfully; and an indicative number range from 2-5 A2D pupils per school (Project Core Team planning document 2012, reference withheld to preserve anonymity). From the quote on page 131, it is

evident that the Project Core Team believed that the targeted schools had a large proportion of pupils that were on "free school meals", from "low participation neighbourhood[s]" or belonged to "low income families" and so perhaps believed that pupils targeted from these schools would fulfil the WP criteria, or at least, the HEI's Access Agreement in this respect. Nevertheless, the Project Core Team did not communicate such criteria to schools, focusing instead on the other pupil characteristics described in the planning document (interest in dentistry and academic potential). Although these broad guiding criteria were communicated to the schools (by the HEI's central WP office), as we shall see in section 7.3, this led to the varying interpretations and enactment of targeting by the schools. This was problematic for the Project Core Team because it risked the sustainability of the WP initiative and lacked alignment with the monitoring criteria (which presumably arose from the requirements of the HEI's Access Agreement) that were set up in the second year of A2D (see page 137). In response to this issue and issues with variable school engagement, the Project Core Team adapted its stance and offered further guidance on targeting; this is discussed next.

7.2.2. Evolution of the HEI's stance on targeting: "[now] the schools are kind of on board"

As a newly evolving initiative, in Year 2 of A2D (2014), the Project Core Team faced three main issues. The first was engagement of the initially targeted schools. Some schools withdrew participation from the initiative and others showed inconsistent engagement by variable attendance at activities or by targeting different pupils for activities. The variable targeting of pupils formed the second issue: schools were not bringing in all targeted pupils for all activities or were bringing different pupils to different activities. Reasons cited by schools (to the Project Core Team and to me) for both these issues included staff shortages and other school commitments. The third issue related to engagement by individuals within the HEI - other staff members to run information sessions during on-campus visits or introductory talks, and dental student participation in the activities. Exploration of the HEI staff perceptions (other than the Project Core Team) was outside the scope of this research study; dental student engagement in relation to activities is discussed in section 8.3, page 186. In this chapter, the evolution

of targeting remains the focus, explored through the evolving perceptions of the Project Core Team members and school staff.

To coordinate the growing activities of A2D and to help with managing some of the issues described above, a WP officer (participant PCT2) was appointed; this individual was supported in her work by the central WP office at the HEI. She had worked in a similar role at another HEI. On targeting of schools, she recognised the need for sustained interactions with the school staff to encourage their participation:

> "I think that's just a question of building a better relationship with those schools, hopefully, and in making, discussing with them the benefits of the programmes […]" (PCT2, Yr2 Int, 2014)"

She felt confident that, in her role as a dedicated WP officer for A2D, she would be able to provide support to the school staff by acting as a point of contact for schools:

> "[…] with consistent communication with them, so that they know who to come to if they have questions and know, you know, get regular updates on how the project is going and things like that." (PCT2, Yr2 Int, 2014)

Individuals are recruited into Figured Worlds as a result of their "history-in-person" (Holland et al. 1998, p.18). This Project Core Team member's previous history in the wider Figured World of WP enabled her to enter the Figured World of A2D; recognition of her history-in-person, that is, her identity (section 3.4.6, page 72), enables us to understand her perspectives and actions related to targeting in A2D and therefore the evolution of the Figured World. As a result of participation in activities specific to the Figured World of WP, she had developed salience with (subsection 3.4.7, page 73), and understanding of, the dominant discourses and practices of that world. In the Figured World of A2D, she carried out the social work of interacting with participants such as the school staff. Her strategy to improve communication with the school staff, to provide a point of contact and to provide regular updates regarding the WP initiative was, through interpersonal interaction, the means by which she was offering schools artefacts (subsection 3.4.5, page 71 and section 6.3, page 121), in other words, cultural tools (as ways to contact her and information updates), to enable them to develop salience with

this Figured World. This would then enable schools to enter this Figured World and enable staff to develop identities as A2D participants.

From her previous experiences in the wider Figured World of WP, she also acknowledged the importance of "the enthusiasm of the teachers and their other commitments" (PCT2, Yr2 Int, 2014) and the constraints resulting from limited resources and changing liaison staff at schools:

> "Umm, it's hard [to maintain communication with schools]! (laughs). Especially when teachers leave and don't tell you that they've left and then you're back to square one trying to find out who to contact, umm, it just takes lot of phone calls, really!" (PCT2, Yr2 Int, 2014)

WP initiatives are frequently reliant upon gatekeeper staff at schools to ensure the continuity of initiatives (see 2.9.2.2); any lack of engagement by gatekeeper staff or loss of continuity between changing gatekeepers results in exclusion of pupils that may benefit from such initiatives. The Figured Worlds theory acknowledges the paradox of constraints within a world (subsection 3.4.9.1, page 75): individuals interacting with a Figured World must submit to certain structural or cultural constraints and that such constraints may be the basis of interpersonal interaction, identity development and evolution a Figured World. The theory also acknowledges that individuals frequently inhabit multiple Figured Worlds, often simultaneously and that social interactions within one Figured World may stem from interpretations within another Figured World (subsection 3.4.8, page 74). This Project Core Team member recognised the constraints within the Figured World of school and by accepting those constraints, by acknowledging the hard work that would be required to engage with some schools, she was accepting her subject positioning at the interface between the Figured Worlds of school and A2D, as a persistent negotiator, evident in actions such as having to make "lot of phone calls".

On her strategy regarding improving engagement of schools, she acknowledged that schools which withdrew engagement with A2D would have to be replaced by others:

> "I guess we'll have to sit down and have a rethink about initiating it [communication] with another school that is going to be more engaged" (PCT2, Yr2 Int, 2014)

Through her interactions (section 3.4.7, page 73 and section 6.5, page 125) with school staff, this individual was offering them subject positions or identities as participants (section 3.4.6, page 72) in this Figured World and offering them a means to enact agency to participate or not; in that sense she was placing the school staff in positions of relative power. Ultimately, however, the subject positionings and the interaction would lead to a shift in the balance of power: for example, in the case of schools that enacted *their* agency to not fully engage with A2D, she would, in return, enact *her* agency through the dominant discourses of A2D (*i.e.,* ensure consistent engagement by schools) and initiate targeting and recruitment of other participant schools. The WP officer did not elaborate on what the "rethink" might involve. However, when attempts at reengaging some schools were unsuccessful, the Project Core Team improvised their strategy as we shall see later in this section on page 122.

While the Project Core Team had described to me the type of pupils they hoped to target, these guidelines were not explicitly conveyed to the schools. This created a sense of frustration for at least one school where the member of staff repeatedly asked the Project Core Team for assistance with targeting the 'most appropriate' pupils. During interviews, other schools' A2D leads did not seem to be concerned about clarification of A2D's expectations for targeting of pupils, although when questioned about their targeting strategy, the data revealed insights into the varying and creative methods adopted by different schools (see section 7.3). With this issue foregrounded early in the data-gathering stage, I was further prompted by the Project Core Team's early concern that schools might:

> "not have the experience to choose the right [pupils], which will mean that they'll [the pupils] drop out [of A2D]" (PCT1, Yr1 Int, 2013)

I had asked this first year Project Core Team member how the HEI could guide the process of targeting of pupils for A2D. She suggested that, for future cohorts, they could devise "a little application process" (PCT1, Yr1 Int, 2013) in the form of written or oral

assessments for pupils. In the second year, the WP officer (PCT2) explained that schools may not have appreciated the longitudinal element of the initiative:

> "I haven't necessarily felt that it's sunk in, what this project is, or that it's a long-term thing [for the same pupils to participate in]" (PCT2, Yr2 Int, 2014)

Of courses, it was possible that schools experienced tensions between the desire to provide the opportunity to the greatest numbers of pupils to participate in WP initiatives and the restriction in numbers of pupils they could target for A2D, as we shall see in subsection 7.3.1, page 141. This tension (conflict) resulted in varying improvisations by the schools even after the evolution of the Project Core Team's stance on targeting, which is discussed in subsection 7.3.2, page 150.

In order to fulfil the HEI's Access Agreement requirement to monitor WP activities, the HEI conducted post-event surveys of school pupils and school staff. The purpose of the survey was to monitor school and pupil attendance at A2D activities and to obtain feedback that might help improve activities of A2D. The survey also included closed questions designed to monitor the socioeconomic characteristics of targeted pupils (relying on pupils' self-reporting of characteristics such as receipt of free school meals (FSMs), parental HE experience, etc.) (FN, 2014). As we shall see in subsection 7.3.2, page 150, this survey was appropriated by a school staff member to help her with targeting pupils. The HEI had not, by then, formally responded to the issue of targeting individual pupils, while it was still ensuring engagement by the schools that had been targeted.

By the third year of A2D (2015), a new WP officer (research participant PCT3) had replaced the first one. Despite the agency and the actions of the Project Core Team and school staff (section 7.3 next), some schools could not continue participation in A2D whereas others were unable to deliver the WP initiative's targeting aim of supporting participation of targeted pupils over several years. In order to provide clarification and guidance in respect of the HEI's vision of A2D, the new WP officer (PCT3), with the help of the HEI's central WP office, created a Service Level Agreement (SLA). Among other topics, this document included the commitment that was expected of the targeted

schools and what the schools could expect of the HEI with regards to A2D; and guidance to schools on targeting pupils. The SLA was part of modifications that this WP officer (PCT3) introduced to A2D.

> "Yes, some of the schools have sort of said, you know, what sort of students, but what I think I have done this year, is I have written a Service Level Agreement for the schools, it has what our expectations are of the schools, and what they should expect from us and what we will do. And part of the Service Level Agreement has a bit on targeting and monitoring. So, it's got information in there about the sort of students that we want to target, so the students are academically able, so they're likely to achieve at least 3 As and 3 Bs at GCSE, which will then, kind of, is a good indicator of them doing well in their A-levels, and then also the sorts of backgrounds of, the Widening Participation backgrounds they should be from, so it's got that information, so hopefully it will be clear to the schools…" (PCT3, Yr3 Int, 2015)

This entrant into the Figured World responded to the uncertainty surrounding pupil selection, *i.e.*, improvised, based on his interpretation of previous documentary artefacts and interpersonal interaction with other participants (such as school staff) by creating an artefact in the form of an SLA, which he hoped would be appropriated by the schools for "targeting and monitoring". An SLA is typically a contract between a service provider and a client outlining the services the provider would deliver and the standard or quality of such services the client should expect. By creating this artefact, this Project Core Team member had positioned the schools and their staff as consumers, rather than as partners (which might have been the case if, instead, a partnership agreement had been created). Similar to consumers in other arenas and in other aspects of HE (*e.g.*, see literature on students as consumers in HE (McCaig 2010; Bunce *et al.* 2017; Tomlinson 2017)), this subject positioning had the (perhaps unintended) effect of placing school staff in positions of power in the Figured World of WP. School staff did, in fact, exercise their agency and interpret the HEI's targeting guidelines in ways that may have been different in ideology and practice from that envisaged by the HEI (see, for example, school S5 discussed on page 152). Nevertheless, at a follow-up interview in

a subsequent year, this Project Core Team member felt that the SLA and his interpersonal interactions with the schools had been successful in ensuring that the most appropriate pupils were being targeted for A2D.

> "…compared to when I started working in the, in Widening Participation, few years ago, umm, the schools, they weren't quite as good at that, selecting the students, but I think certainly [now] the schools are kind of on board."(PCT3, Yr5 Int, 2017)

In contrast to the perception of this member of the Project Core Team, the HEI's annual evaluation reports of A2D (written by other members of the HEI's WP team) repeatedly highlighted issues related to targeting. In a later monitoring document obtained for this thesis (2016-2017, reference withheld to preserve anonymity), the report concluded that the WP initiative continued to target fewer than anticipated pupils from WP backgrounds (reference withheld to preserve anonymity). The evaluation report also noted difficulties with retention[8] of pupils for A2D. It attributed the difficulties to the targeting methodology that had been employed, in that the responsibility for targeting was situated within individual schools. The document further suggested that in the following year, the initiative would test an application process, which would fulfil multiple functions: ensure the 'most appropriate' pupil groups were targeted; aid retention in A2D by enabling the most interested pupils to participate and foster a positive attitude amongst pupils by allowing them to "feel that they [had] been selected" (reference withheld to preserve anonymity). It was hoped that these measures would not only resolve issues with targeting for A2D, but also achieve the WP initiative's aim of long-term, sustained engagement with young individuals. Thus again, in response to the continued difficulty in targeting appropriate young people for A2D, an improvisation by the HEI aimed to create another artefact, an application process, that might be appropriated in succeeding years. The document provides some interesting insights into the Project Core Team's hypotheses at this point: the Project Core Team believed that retention in WP initiatives depended on pre-participation levels of

[8] Retention in this context refers to the continued engagement of the same pupils with A2D, and differs from retention in HE, which refers to the continued enrolment of a student in a programme of study at HE, sometimes referred to as persistence (Burke 2019).

interest; that this interest could be reliably assessed through some means; that targeting pupils would foster a sense of positive self-worth and that if the 'right' pupils were targeted, their sustained engagement would follow. These hypotheses do not account for changed circumstances or other reasons which might lead to a perceived need to prioritise something else instead of A2D. Furthermore, there is no evidence in this document of the exploration of other reasons for lack of retention: the possibility that pupils did not enjoy engagement with A2D or did not find it sufficiently useful or motivating to want to continue participating in this WP initiative. As we shall see in Chapter 8, the motivation to want to continue to participate in a Figured World depends on an individual's salience with that world, which in turn, is affected by multiple factors, including the perceived usefulness of activities or recognition of figures that may be significant to their imagined future.

A subsequent report reviewing the initiative from the inception of its monitoring (2014-2017, reference withheld to preserve anonymity), however, reported that the application process had not been employed by the Project Core Team (without elaborating on the reasons), and noted that the initiative continued to target fewer pupils from disadvantaged backgrounds than WP initiatives that relied on application by pupils. Irrespective of whether this final improvisation was implemented or not, the circumstances that led to it provides a glimpse into the future and raises questions that may be the focus of future action for the initiative:

- What might an application process comprise? To what extent would it be considered and found to be valid and reliable? What kinds of equality, diversity and inclusion issues might an application process itself raise?
- Who would approach the pupils? Would gatekeeper staff at schools be responsible for this?
- How would 'most appropriate' be envisaged? In contrast, what would 'most interested' entail? How would the potential tension between 'most appropriate' and 'most interested' be resolved?
- How would retention be defined in a WP initiative? Would it represent participating for a certain number of years in a WP initiative, or would it require completing participation in A2D and application to HE?

7.2.3. Summary of HEI's stance on targeting

The section has highlighted the Project Core Team's stance on targeting and has traced the evolution of this stance and the enactment of targeting by the Project Core Team. There was an initial conception of targeting in terms of its desired outcomes, but the Project Core Team did not perceive the need to be prescriptive and chose not to convey their holistic conception of targeting in its entirety to schools. As the programme was reviewed each year concerns about targeting were noted and improvisations were designed to mitigate the perceived shortcomings. Arguably this was an annual plan-do-study-act improvement cycle. However, there is little evidence of partnership working between the Project Core Team and schools. The importance of this partnership working will be revisited in subsection 9.4.1, page 215.

7.3. Perspectives of school staff on targeting pupils for A2D

7.3.1. Early issues: "we didn't have clear guidance"

We have seen in subsection 7.2.1, page 131, that the Project Core Team had provided only broad guidelines to the schools regarding targeting. The permissive stance not only enabled schools to target varying numbers of pupils at the outset, but also prompted improvisations by the schools in respect of targeting. The data revealed that some schools struggled to balance targeting few pupils against the wish to provide opportunities to all pupils and so, in an attempt to moderate this difficult decision, schools relied, at least to some extent, on pupil interest. However, as we shall see next, although the perspectives guiding the schools were similar to one another, the resultant responses were quite different and led to distinct improvisations: through creation and appropriation of artefacts, through previous experience and through subject positioning.

7.3.1.1. Improvisations rooted in personal history, personal values and through artefacts not linked to A2D

During the first year of A2D, a school staff member (SS4) repeatedly raised concerns about selecting appropriate pupils for A2D. A member of the Project Core Team suggested strategies such as selecting pupils from a Gifted and Talented (G&T) list (FN

S3, 2013). This school staff member noted that simply choosing G&T pupils might not necessarily be the most appropriate strategy for a WP initiative although in the absence of clear guidance, she might have to resort to using the school's G&T list for the first year. She then mentioned that she herself was a first-generation entrant to HE in her family and felt that she understood the importance of appropriate selection of pupils for WP initiatives (FN, 2013). The extract below is from her first research interview, when she described her concerns about selecting appropriate pupils:

> "…we didn't have clear guidance, we managed to select three students who are typical WP students, I think, and three who potentially really are not, or at least aspects of their lives that are not […] I'm working in partnership with one of the science teachers, who is just someone I happen to get on really well with on a personal level […] so within 24 hours, I had a list of names of people that she taught, who she knew were very good in all aspects of science, umm, and from that I picked… we wanted a mix of ethnicities, we wanted a mix of genders, we invited those students whose names she had put forward arguably a bit randomly, because although she knew they were good, she doesn't teach every single Year 9 student. We also asked tutors to ask in their forms, hands up those who were interested. So that was how it happened. I invited them [to the careers office]. I showed them a clip of your dentistry students talking that I just found on [the HEI's] website and asked them who was interested. And of those students, three girls and three boys put their names forward, which seemed to me… you'd said six at the most, we have three girls, we have three boys, we didn't have any black students, but other than that ethnically they were pretty diverse – that seemed tick boxes enough for me – right we'll run with that. Which is how you've ended up with three WP students, and three not." (SS4, S3, Yr1 Int, 2013).

Here we see how this individual's personal history, including her beliefs and her professional role, influenced her interaction with the Figured World of A2D. She entered the Figured World of A2D as a result of her role (careers co-ordinator) in the Figured

World of her school. She expressed a strong belief in targeting appropriate pupils for WP initiatives partly as a result of her personal history of being a first-generation HE participant, "my dad was a chauffeur, my mum was a secretary" (SS4, S3, Yr2 Int, 2014). She also described an implicit belief in the school having a high proportion of pupils from WP backgrounds:

> "Arguably any student fits the widening participation criteria from this school, because we have about *40% of the students on Free School Meals*, we are *ethnically very diverse*. The data that is more difficult for me to get is *have your parents been to university or not*." (SS4, S3, Yr2 Int, 2014; emphasis added)

From the quotes above, it is apparent that this school careers coordinator and key point of contact for A2D, beginning to navigate the newly created intersection of the familiar Figured World of school and unfamiliar Figured World of the new A2D initiative, used individual and group criteria when targeting pupils. Individual criteria included aptitude for science and interest in the A2D initiative. To differentiate WP pupils from other pupils, she considered their socioeconomic circumstances, using free school meals (FSMs) and parental experience of higher education as markers for this. Within the constraints of the Figured World of her school, she used the artefacts to which she had access and secured the assistance of other figures (school colleagues) to identify pupils with the individual characteristics she prioritised. At a group level, her targeting of pupils for A2D was influenced by her personal beliefs, underpinned by her personal history. She was keen to ensure that the group contained pupils who met her criteria for having a WP background; she was also committed to securing ethnic and gender diversity within the group. She was reasonably content with the resultant group but noted that only half the pupils met her view of a WP background.

However, this careers coordinator was frustrated by the limited guidance she received for targeting pupils for A2D at the outset. This frustration then became a site for multiple instances of agency, improvisation and artefact appropriation. First, she employed her agency and turned to a colleague (another figure within the Figured World of the school) with whom she shared good relationships "on a personal level" (a notional artefact; see subsection 3.4.5, page 71) and drew upon their knowledge of pupils – another notional

artefact – to swiftly obtain a list of pupils with the key attribute "very good in science" (improvisation). She selected within this list using two further attributes: "mix of ethnicities", "mix of genders" (personal values and values in the Figured World of the school). Second, in classes not taught by the first figure to which she turned, she asked other figures – form tutors – with good knowledge of the pupils (notional artefact) to identify pupils that were interested in A2D (improvisation). Finally, she used a video artefact from the HEI's website to garner pupil interest in A2D (agency, improvisation and appropriation of a tangible artefact not necessarily created for this purpose). In the course of these improvisations, despite her strong beliefs about appropriate targeting of pupils for WP initiatives, she did not provide her colleagues with WP criteria that she believed were important, such as lack of parental HE experience, or eligibility for FSMs. However, as she explained in the quote above, she faced difficulties accessing data on pupils' parental HE experience and so might have assumed teachers would face similar difficulties. Nevertheless, her multifaceted responses to limited guidance on targeting from the A2D Project Core Team enabled the successful launch of the new Figured World of A2D in her school, ensured its perpetuation at least for that year and contributed to its early evolution. Thus, the evolving Figured Worlds of her school and A2D became linked.

From a Figured Worlds perspective, this improvisation and the artefacts appropriated as a result became symbolic for this careers coordinator, positioned at the interface of the Figured World of her school and A2D. Furthermore, these artefacts could be appropriated by other participants (*e.g.,* if other schools faced similar frustrations with targeting) and had the potential to create powerful shifts in identities of school staff and pupils and in the evolution of this Figured World.

Examples of other analytical components of Figured Worlds are also evident from the quotes above. By asking selected pupils whether or not they wished to participate in A2D, this careers coordinator was offering them particular subject positions (or identities; see subsection 3.4.6, page 72), which the pupils had the agency to accept or reject (and is further analysed in subsection 7.4). Individuals inhabit multiple Figured Worlds and the interactions in one world are often carried into others as artefacts. In this instance, the careers coordinator described in this section (SS4) created a link

between the Figured Worlds of A2D and school and enlisted the help of her colleagues to target pupils from the Figured World of school into the Figured World of A2D. She created further connections from the Figured World of A2D, to the Figured World of the HEI, by appropriating the video artefact described above. Through her actions and her improvisations, the evolving Figured Worlds of her school, the HEI and A2D were linked together.

7.3.1.2. Improvisations arising from previous experience (history-in-person) supplemented by artefacts from A2D

In contrast to the approach in the previous subsection, the head of sixth form (SS2) at school S2 was the key contact for A2D and utilised a different approach to targeting pupils. During a research interview[9] in the first year of A2D, she explained that after the introductory talk by the Project Core Team to Year 8 pupils (see subsection 8.2.1, page 166), she (SS2) had described A2D to all Year 9 pupils and invited expressions of interest. She thus appropriated artefacts from the Figured World of A2D: the notional artefact of the knowledge that she gained from the introductory talk (an event-another notional artefact) and interpersonal interactions with PCT members, as well as tangible artefacts such as documents produced by the Project Core Team, thereby exercising her agency in the Figured World of her school to recruit pupils into the Figured World of A2D. Twelve pupils from Year 9 approached her; of these, four pupils were targeted (by her and the science teachers) on the basis that they were "bright", with previous good grades and most likely to remain committed to A2D. She explained to me that one other criterion had been to include those that they felt might benefit most in terms of HE choices or progression from the programme.

On that occasion, the head of sixth form had not perceived difficulty selecting four pupils. Upon further probing about the difficulties she anticipated for future cohorts, she reflected that, in the event of being required to choose between pupils with similar academic abilities, she would draw upon the school's strategy for selecting pupils for

[9] Unfortunately, the digital interview recording on this occasion was inadvertently deleted a few hours following the interview and following my own hearing of the recording. I became aware of the error on the same day. I used my notes and drew upon my memory to recreate the conversation in a textual format and emailed the document for member-checking to the research participant, explaining the reason for this action. The data from that interview therefore comprises my detailed field notes.

other activities – a strategy that was directed at pupils' home circumstances. To help me understand, she described the school's strategy for selection of hockey teams. She explained that, when selecting pupils for hockey teams to represent the school, the staff sometimes selected those with the most challenging home circumstances, even though they might not be the most able pupils for that sport (FN (SS2 S2 Yr1 Int), 2013), because these would be the pupils that would benefit most from support and guidance from the school. This strategy was partly a result of the school's ethos, which was that of promoting a certain attitude and behaviour aimed at instilling good learning trajectories amongst the most vulnerable young people. This ethos, embodied in this head of sixth form as her history-in-person (see subsection 3.4.6, page 72), was the past experience in the Figured World of school that would intersect with the circumstances of another Figured World, of A2D, leading to her improvisation in targeting pupils. It is worth noting that the profile of the pupils from this school (S2) was more disadvantaged than that of school S3 in the previous subsection; for example, amongst the sixth form pupils in 2013, only one pupil had parental or sibling experience of HE (FN (SS2 S2 Yr1 Int), 2013) and as another staff member at the school described, most pupils faced multiple barriers:

> "[…] we have very low socioeconomic groups, lots of single parent families, lots of parent mental health issues [parents who are] drinkers or drug-takers, um, parental splits going on, housing or monetary or finance issues, […] and very low aspirations." (SS1 S2, Yr1 Int, 2013)

This would suggest that the head of sixth form at school S2 did not necessarily have to worry about not targeting the most appropriate pupils in the same way that the careers coordinator (SS4) from school S3 did. As a result of this school S2's pupil profile, which shaped the school's head of sixth form's targeting strategy, at least one targeted pupil from this school S2 required persuasion (with assurances) by his teacher to participate in A2D (discussed further on page 156).

7.3.1.3. Improvisation through subject positioning combined with structural constraints

Interestingly, another school (S4) adopted a 'first come, first served' approach. At this school, the G&T coordinator (SS6) was asked by the assistant headteacher (SS5) to

organise the pupils and resources for activities in A2D (subject positioning). The following are selected excerpts from the research interview with the G&T coordinator as she discussed targeting in the first year:

> "I was given the information from [assistant headteacher]. We're thinking about [participating in A2D], *can you make it happen?* I said okay! (laughs) […] *I could do [with] a bit more notice really*! […]
>
> Yeah, you don't want to not give someone the opportunity to do it, but equally, if you've got a small number of students that the opportunity is available for, it's hard to know […] who would benefit from it the most […] if we still end up with 10 or 20 students, *how do you then select* from those 10 or 20, which will be your five or four that you'd be taking on to the programme? I think that's *quite a difficult thing* […]
>
> I just came in and said, the first five pupils who get their replies to me, *the keenest ones can come* (both laugh) […] *I don't know if that's the best way to select them.* It might just be [those] five who least wanted to be in school at that point. I don't know. But out of the ones who went [for the on-campus workshop], I think there were four who went, and three of them were really keen to stay on for the course afterwards. So, that's good […]
>
> I think I spoke to [the top] five of the eight [ability] sets [of Year 9 pupils] because I knew you were looking for students who were going to at least get a B at GCSE […] But that was *also a more time constraint thing* than anything else […] Umm, cos I would've liked to have spoken to all of them about it as an opportunity […] It's difficult to know who to say yes [to]… so it was mostly, who arrived most excited and brought [the signed parental consent form] to me quickest was the criteria [for selection to A2D]" (SS6 S4 Yr1 Int, 2013; emphasis added).

The series of excerpts above demonstrate some useful insights about targeting in this school. At first glance, this was an approach to targeting that was quick and easy to implement. The reasons for this approach are evident within the quotes: with the

possibility of being over-subscribed and having to select within constraints of time and with limited guidance from the HEI Project Core Team ("at least a B-grade at GCSE", a rough guide to numbers of pupils), the G&T coordinator targeted the "keenest" pupils for A2D. Thus, this G&T coordinator, like the careers coordinator and head of sixth form described in the preceding subsections, improvised her approach to targeting and, at least for that particular year, succeeded in ensuring the participation of her school (and its pupils) in the Figured World of A2D.

How did this improvisation come about? There were two levels of subject positioning. First the G&T coordinator was recruited into the Figured World of A2D and positioned in it by a more senior member of staff at school (the assistant headteacher) as someone who could "make it happen". Subsequently the G&T coordinator positioned pupils to enable rapid selection among them. The G&T coordinator responded to her subject positioning and to the structural constraints (time constraints, restrictions on numbers of pupils to target), which conflicted with her personal beliefs ("you don't want to **not** give someone the opportunity to do it"); this conflict led her to improvise and target the most enthusiastic pupils from a smaller, higher ability group of the cohort, thereby allowing her to overcome time constraints. In doing so, she positioned the pupils as either enthusiastic responders or non-responders.

The G&T coordinator did not reflect upon the characteristics of the pupils she was targeting, in terms of their WP status. She had mentioned earlier that several pupils at their school had either no parental HE experience at all or none in the UK (which some school staff in my study equated to no HE experience). She recognised the potential flaws in her targeting approach (uncertain of the "best way", motivation for pupils to have a day out of school). However, she also suggested that the approach may have been successful for this cohort, because three of the four pupils were keen to continue to participate in A2D following the on-campus workshop. As a result of her actions, whilst the pupils had no choice in the subject positions they were offered in the Figured World of school, they could still exercise a degree of agency in their decision to enter (or not enter) the Figured World of A2D (see section 7.4 for a discussion of school pupils' perspectives). So, the subject positioning of the G&T coordinator by the assistant headteacher, and structural constraints that the G&T coordinator faced, were the

drivers for improvisation by further subject positioning of pupils in the Figured World of A2D.

7.3.1.4. Comparing the three sets of improvisations

The examples of three schools described in the preceding subsections show similar guiding perspectives that drove three different improvisations by the A2D key contact Figure (and to some extent their colleagues) in each school. The first example (section 7.3.1.1, school S3) was related to appropriating existing resources from multiple Figured Worlds, including the creation of artefacts from resources that were not designed for targeting pupils for A2D. The second example (subsection 7.3.1.2, school S2) relied on selection methods in another Figured World to help target appropriate pupils for A2D, but was also dependant on school staff's ability to encourage reticent pupils to participate (discussed further on page 156). This relied on the interpersonal interactions between staff and pupils in the Figured World of school. As such, this improvisation risked excluding those pupils that, for various reasons, may not have fostered positive relationships with school staff. The third example (subsection 7.3.1.3, school S4) was probably the most simplistic approach (and the one most vulnerable to negative consequences). The approach relied on pupils' enthusiasm to participate in this WP initiative, thereby potentially excluding those that were perhaps not confident enough to approach the teachers. The approach also risked including a greater proportion of pupils who were not from WP backgrounds, pupils who would struggle due to insufficient aptitude for science and risked drawing a sample of students which was not representative of the wider population of WP pupils in terms of characteristics such as ethnicity.

All three approaches were grounded (at least initially) in schools' (or individual staff members') pre-existing beliefs and values (characteristics that defined WP pupils, the importance of appropriate targeting, providing opportunities for participating in WP initiatives to as many pupils as possible) The staff at the first two schools (schools S3 and S2) focused on the need for targeting pupils who they perceived to be appropriate for A2D and improvised by creating the artefacts described in subsection 7.3.1.1 (school S3) and subsection 7.3.1.2 (school S2). If these artefacts (ways of targeting pupils) proved successful, they could be appropriated for use with future cohorts of school pupils.

Other targeting methods, such as the 'first come, first served' one (subsection 7.3.1.3, school S4), were easy to implement, particularly in schools with limited resources or staff. However, this improvisation could have potentially negative consequences for pupils, namely, that the most appropriate pupils might not be selected for the project, while those that did get selected might not benefit from the project or might be set up with unrealistic expectations. A Figured Worlds perspective allows us to view these issues as sites of further improvisation and evolution. If indeed these improvisations and artefacts were deemed unsuccessful, in a Figured World, there would be room for further improvisation, not just by the school staff but by other participants in this Figured World, such as the Project Core Team.

Furthermore, all improvisations, even the unsuccessful ones, can produce at least notional artefacts, whether in the Figured World of A2D, as discussion points for targeting of pupils for WP initiatives, or even as research material for this and future studies. As we have seen in section 7.2.2, the Project Core Team responded to this issue of targeting, and as we shall see next, school staff continued to improvise creatively in response to the evolution of the Project Core Team's stance and their actions formed the basis for further improvisation.

7.3.2. Schools' evolving responses to targeting

Targeting of pupils for A2D was, for different individuals and different groups of participants in A2D, a point of more or less discussion, a source of greater or lesser frustration and an issue that led to improvisations and artefact appropriation. The improvisations by schools in this respect continued in subsequent years. We have seen in subsection 7.2.2, page 133, that in the second year of A2D, some schools brought in different pupils from the first cohort compared to the first year. From the perspective of A2D, this was a flaw in the targeting strategy being used by the schools. From a Figured Worlds perspective, this is another site for improvisation. The schools experienced tension between their philosophy of providing opportunities for participation in activities to most pupils and the HEI's constraints of numbers of pupils to target. Faced with this tension, in the (perceived) absence of clear guidance from the HEI, and with the added constraints of pupil unavailability, some schools improvised and exercised their agency in targeting different pupils for different activities in A2D. It is

worth noting that, of the targeted pupils, all my research participants were part of the initial cohorts that participated in A2D and therefore do not capture those who entered at a later stage (Year 10 or later, rather than in Year 8).

One school staff member, the careers coordinator (SS4) at school S3, continued to find the lack of an appropriate targeting strategy a source of frustration. Her improvisations in response to this issue at the outset were described in subsection 7.3.1.1. Pupil agency and enthusiasm as the basis for her improvisation will be further described in a separate incident on page 158. During the second year of A2D, at a research interview following an annual on-campus A2D workshop, she felt that she had succeeded in appropriating a targeting strategy:

> "… in the previous group, half of them, out of six, three have parents who've been [to university]. Because I wasn't selective enough in choosing them. Then I saw the [post-workshop evaluation survey] that [the HEI] asked us to fill in and it was completely comprehensive. So now I know that for next year's intake, that's what I need to use [to select pupils]." (SS4, S3, Yr2 Int, 2014)

She was referring to the monitoring survey that the Project Core Team had begun to conduct in the second year of A2D (see page 137). Part of the survey consisted of questions on characteristics of the targeted pupils (as self-reported responses). Once again, this staff member's history-in-person, her previous experience with A2D and the current circumstances came together to enable her to improvise. She appropriated some of the survey's elements to help with selection of pupils for subsequent cohorts. So, an artefact in the Figured World of A2D, which held certain significance for the Project Core Team (monitoring of participants in their WP initiative), was given a different meaning by the school staff member and appropriated as an artefact that would help her with targeting.

At the other two schools described in sections 7.3.1.2 and 7.3.1.3), when I raised the issue of targeting at subsequent meetings, neither school reported any problems with targeting. A change in staff at one school (S4) meant that the assistant headteacher depended on teachers from the science department to enable targeting of pupils and

upon questioning whether she had been informed of any issues in this regard, she emphatically responded with "No, no. Not at all" (SS5, S4, Yr2 Int, 2014). Of course, the assistant headteacher was not involved in the actual targeting of pupils. It was not possible for me interview the teachers from the science department to gain insights into their perspectives on targeting pupils for participation in in A2D.

In 2017, when the initiative was in its fifth year, I met a science teacher from a school (S5) which had been recruited into A2D in the previous year. Data presented here are from my field notes of that meeting, as the teacher did not ultimately respond to my emails requesting a semi-structured interview. When I asked her what her targeting strategy had been, she explained that she first followed the HEI's targeting criterion (see also subsection 7.2.2, page 133) of shortlisting pupils who were on FSMs. Of these, she then further narrowed the numbers to those pupils who had demonstrated an interest in medicine or dentistry. Within this smaller group (she did not describe numbers), she then targeted pupils that were known to be academically able at science, as suggested by the HEI, allocating these half the A2D places available to the school; while the other half of the selected group comprised those that she perceived to have the potential to achieve high grades. I then asked her if she had faced any issues with targeting, she responded that she found it "very difficult" (FN, Campus Visit, 2017). Upon further questioning, she explained that she found it difficult to choose the small numbers required (4-5 pupils for each stream: medicine and dentistry). Unfortunately, because of time constraints then, I could not explore further on this topic and I could not determine the role, if any, of pupil enthusiasm in the targeting process. However, the field notes recorded some interesting new data. Firstly, it was evident that by this point in the evolution of the WP initiative, schools were being given guidelines on targeting, including the so-called 'WP criteria' on which to base the targeting. Secondly, this teacher had exercised her agency and improvised by targeting a proportion of pupils that might fall outside the stated academic criteria provided by the HEI. This teacher's improvisation was based upon a perspective and ethos similar to that of other schools (*e.g.*, S4, subsection 7.3.1.1 and S3, subsection 7.3.1.2), that is, of providing opportunities within WP to as many pupils as possible. This teacher's improvisation relied heavily upon her perceptions of pupils' potential ability to gain the required high

grades in the future. It was beyond the scope of this study to examine how accurate teachers' perceptions of future academic performance were.

7.3.3. Overview of targeting by schools

The literature on targeting (section 2.9) suggests that WP practitioners must ensure that targeting is well organised at the outset, provide clear instructions and utilise published guidelines, otherwise there is a risk of inappropriate targeting of pupils. It might follow, then, that the issues faced by the school staff in the early years were a sign of failure of the Project Core Team; however, the diversity of the schools meant that it might not have been appropriate for the HEI to be overly restrictive in this aspect. Referring back to the quote by the Project Core Team member in subsection 7.2.1 on page 131, the HEI perhaps believed that, as the secondary schools had been targeted based on the cohorts of pupils they served, these criteria did not need to be part of the initial guidance.

The data on schools' approaches to targeting revealed multiple facets of the decision-making process in relation to targeting: reliance on staff relations and staff knowledge of pupils' (real or potential) academic ability, utilisation of artefacts and strategies created for other purposes, reliance on pupil interest and enthusiasm. All of these strategies were driven by the desire to provide WP opportunities to the greatest number of pupils possible.

Two schools in this study utilised a combination of the approaches, such as reliance on interpersonal relationships, or artefacts from other Figured Worlds, combined with pupil enthusiasm; the strength of exploring multiple facets may lie in the philosophy of 'leaving no stone unturned'. Approaches based on interpersonal relationships and displaying enthusiasm carried the risk of excluding pupils who lacked confidence or enthusiasm or did not have good relationships with school staff. However, recognising and acting upon pupil reticence or upon perceived academic potential (as opposed to prior academic performance) could be seen as mitigating undesirable effects of reliance on interpersonal relationships, pupil agency and prior attainment.

Figure 10 below is a schematic representation of the facets of the decision process in relation to targeting of pupils. Targeting followed the HEI's guidance to the schools, which included criteria related to pupils' academic abilities, but none related to WP

criteria. The facets of the schools' targeting decision process are depicted in the rhomboid shapes, much like the facets of a prism, and collectively represent the analytical concepts that describe targeting in this Figured World: agency, improvisations, artefacts, individual identities and interpersonal interactions.

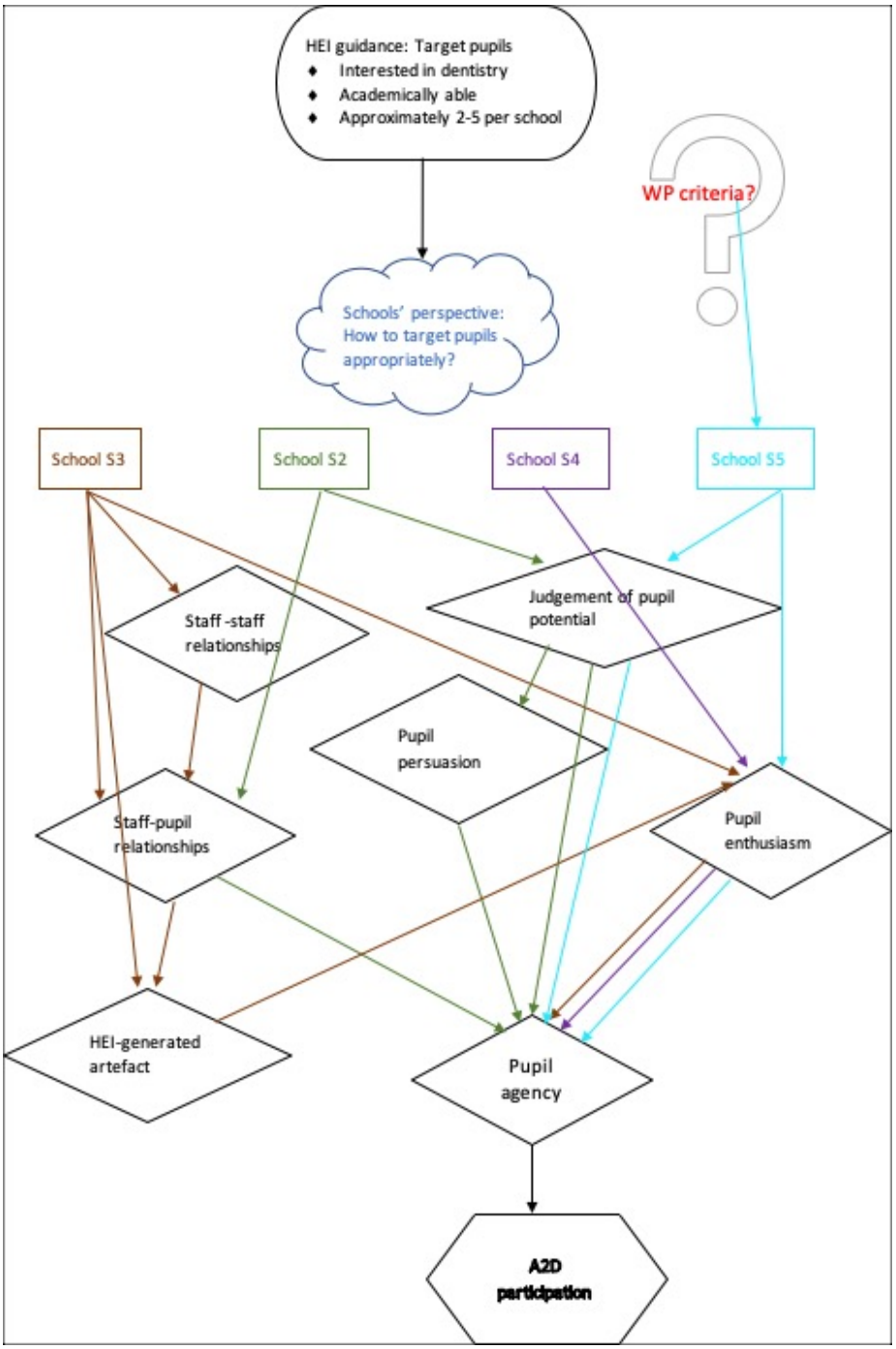

Figure 10: Flowchart depicting schools' improvisation in targeting pupils

By reducing the actions of the schools into a simple figure, the similarities and differences between the schools are easier to see. For example, schools S3 and S2 approached targeting through multiple dimensions, including staff-pupil relationships and pupil enthusiasm, whereas school S4 depended solely on pupil enthusiasm. The use of the HEI video artefact was unique to school S3. The hockey team selection strategy (not depicted in this diagram) was unique to school S2. However, this school and school S5, both recognised the value of persuading some pupils that they perceived to have the potential to benefit; in that sense these schools were similar. The school ethos drove these schools to make the added effort needed to persuade some pupils, despite the possibility of failure of this strategy. This may be an important contribution of schools in targeting pupils for WP initiatives. In Figured Worlds, the work of social interaction is important for participants to develop salience (see subsection 3.4.7, page 73) with that world. In schools, where efforts to 'persuade' pupils towards certain courses or initiatives do not exist, that is, where the discourses and social interactions do not allow it, and when the pupils' Figured Worlds of home do not create circumstances to develop identities as potential HE learners, the pupils are unlikely to themselves develop the salience or shape their identities towards HE participation. Ultimately, however, irrespective of the approaches and irrespective of the improvisations, there is room for pupils' agency in the Figured World of school (discussed further in section 7.4, page 155) in accepting or rejecting their subject positioning in the Figured World of A2D: those pupils that accepted this subject positioning would participate in A2D. It is worth noting here that data on targeting were not available from other schools that participated in A2D but not my research study; as such their perspectives (whether diverse or similar) are necessarily absent from this study.

7.4. School pupils' perceptions on targeting: "And I thought, I might as well"

Sections 7.2 and 7.3 demonstrated the agency (and resulting improvisations) of staff at schools and in the HEI in relation to targeting pupils for participation in A2D, thereby placing the pupils in particular subject positions (and therefore identities). The actions of these participants might suggest that the adults held almost all the power. However,

the study data highlighted that pupils also enacted agency in being recruited to the Figured World of A2D and were not merely passive receivers or subjects of the actions of the adults. This section reveals the pupils' agency as they negotiated their position within the Figured World (see sections 3.4.6 on page 72 and 6.4 on page 123) and authored their identities. With a single exception (on page 157 below), it is not possible for this thesis to explore perceptions of those not targeted for this WP initiative.

Some pupils entered this Figured World so they could gain more knowledge about their chosen career:

> "I always thought [dentistry] can be an option. But I never looked that deeply into it. Cos, it was just like friends and outside view, but I never got to ask anybody. Cos there's no one in my family who's been in that industry, so this way I could - it was easier for me to talk to somebody." (SP7 S4 C1 Year 9, Yr1 Int, 2013)

For one pupil, the attraction of monetary benefits from a career in dentistry was the driver to participate in A2D.

> "I remember that I read [in] an article once, when I was [on public transport] that dentist[s] earn […] a lot [of money]. That's the only reason I thought about it. That's just the first thing that came to my head when Miss asked us about it [participating in A2D]." (SP2 S3 C1 Year 9, Yr1 Int, 2013)

Some pupils, who had no familial experience of HE, were, at least initially, reluctant recruits into this Figured World. I asked a Year 9 pupil how he came to participate in A2D. He described that a teacher had encouraged him to join the initiative:

> Pupil (SP9): Basically, he said something about, like, how, people could approach – he told everyone about it in the class, and then people had to er, like, go up and ask and, like, see if they could do it. And he actually didn't ask me at first, cos I wasn't too sure about it. But he recommended me apparently, yeah.

> Researcher: Okay, and then what did you think when he did recommend you?
>
> Pupil (SP9): [The school liaison staff member] said that you should try it and see if you like it or not. If not, you can just drop it. And I thought, I might as well. Cos, like, I don't really have an idea what I want to do after uni. Or at uni." (SP9 S2 C1, Year 9, Yr1 Int, 2013)

Unlike the other two pupils quoted earlier in this section, this pupil had to be persuaded to participate A2D. Part of the teacher's strategy to encourage the pupil was the assurance that he could "just drop it" if he did not like the initiative. The teacher may have recognised the reticence of the pupil and framed participation as less of a commitment to make it a smaller step to take, offering a way out if needed. Schools and HEIs frequently frame disadvantaged young individuals in positions of less power. From the Figured Worlds perspective, this pupil was in a position of power – the power and agency to reject the subject positioning as a participant in A2D. When designing the WP initiative, the HEI had anticipated a certain degree of attrition in pupil numbers (HEI planning document, 2012; reference withheld to preserve anonymity). However, similar guidelines had not been provided to the schools. The teacher recognised this pupil's position of power and improvised by allowing the pupil flexibility with regards to participation in A2D (also discussed in subsection 7.3.1.2). By engaging in the activities of A2D, the pupil might experience shifts in identity in the Figured World of school (such as by working towards admission for HE). The teacher's actions may, therefore, provide the impetus for this pupil to participate in another Figured World (of HE) that might be otherwise inaccessible to him.

In the three examples given above, we have seen different motivations for young individuals to participate in A2D. By entering and interacting with the Figured World of A2D, the pupils could appropriate artefacts (such as knowledge about particular HE courses) that they might use in other Figured Worlds, such as those of home, of school or of admission to HEIs (discussed in Chapter 8).

While it seemed that most pupils were targeted (albeit in different ways) by their teachers or other members of staff at school, one pupil (SP16) employed her own agency

and asked to be targeted for the WP initiative. This pupil had previously decided upon a career in dentistry ("I've always wanted to be a dentist"). So, when she found out there was an opportunity to participate in an initiative designed to access dentistry as an HE option, she was keen to be involved in it:

> "Umm, originally, my name wasn't put down. So, umm, I was just thinking, oh so my name's not put down, and it's not like, usually, I'd be like, oh, okay it's fine, you know, and there'll be other opportunities and stuff, but this [opportunity to participate in A2D], like, I was so determined to do [missing word] and stuff, so I went and spoke to [the careers coordinator] – this was last year, I went and spoke to her, and I said to her, umm, could I umm have a form? Can I go to the trip? And she goes, oh we'll have to see cos of the numbers and stuff, and then, next day, I was ill, so I wasn't in school, and then about 4 o'clock, 4:30 in the afternoon, she called at home and she goes, oh yeah, umm, you can come to the trip, and I was so happy" (SP16 S3 C2 Year 10, Yr3 Int, 2015)

This pupil had familial experience of HE ("My mum did law in university"). Other research has examined the effects of family HE experience in the form of social capital (see section 2.6.2, page 34), which enables individuals to consider progression to HE as a natural choice. A Figured Worlds perspective enables us to view this as familial experience as affording an identity developed in the Figured World of home; she had therefore developed the identity of one pursuing HE choices. This identity (and the circumstances that allowed its development) led to her agency which, in turn, prompted the careers coordinator, SS4, to improvise in a manner similar to that in previous years (see subsection 7.3.1.1, page 141), by choosing her for participation in A2D, when she might not have the WP characteristics that the careers coordinator was aiming for. Improvisations can be embedded within the practices of a Figured World as an artefact. The careers coordinator had embedded her previous improvisation (subsection 7.3.1.1, page 141) as an artefact and afforded this 'enthusiastic' pupil entry into the Figured World of A2D. From a targeting perspective, it could be argued that this individual might have progressed to HE irrespective of whether she was selected for A2D, and therefore might constitute "deadweight" (Waller *et al.* 2015, p.13). This could be considered

inappropriate targeting for WP and is one of the issues raised in the WP literature (section 2.9.2.3 on page 54). However, from a Figured Worlds perspective, her agency provides the landscape for other actions, interpersonal interactions and improvisations by participants in A2D and in other Figured Worlds. This is important because improvisation is a central mechanism by which artefacts may be formed, social interactions may occur, new identities developed and eventually, the Figured World itself may evolve (see section 3.4.4 on page 70). As a result of the interpersonal interaction between this pupil and the careers coordinator (SS4), this pupil was recruited into the Figured World of A2D. It could also be argued that this pupil's agency acts as a notional artefact in discourses on targeting (such as this thesis).

7.5. Summary and conclusions

The findings in this chapter have offered insights into perceptions of different stakeholders towards targeting of pupils for A2D. Targeting in A2D was a complex issue and posed difficulties for staff at the HEI and at some schools associated with A2D. Some of the constraints of and drivers for targeting in A2D were similar to those described in the extant literature (see section 2.7.2 on page 39). The responsibility for targeting rested with those traditionally considered to be in positions of power as a result of their role (*i.e.*, school staff, WP Project Core Team). At the outset of the initiative, targeting guidelines were permissive and led to uncertainty amongst school staff about how to target the most appropriate pupils. This, in turn, led to varying enactment of the targeting guidelines by school staff, adaptation of targeting guidelines by the Project Core Team and continued varying interpretation of the new targeting guidelines by school staff; thereby frequently shifting positions of power in this Figured World: from school staff to the Project Core Team and back to the school staff. The school pupils also enacted agency and their agency was at least partly responsible for enabling their targeting and entry to A2D. So, in A2D, targeting resulted from a fusion of three interrelated drivers: principles, pragmatics and prediction. These were experienced differently by different stakeholders.

Principles:

- The Project Core Team took a principled non-directive stance on targeting at the beginning to allow school-specific variation but did later convey some guidance to align targeting in A2D with the HEI's ethos for this initiative and (or) with the HEI's policy statements (such as Access Agreements).
- Several school staff drew upon the principle of needing to select the 'right' pupils – a mixture of possessing the positive baseline of being good enough at, and sufficiently interested in, science (arguably about not setting pupils up to fail) and of deficits (*e.g.*, no family experience of HE) which could be remedied by participation in A2D. In at least one case this principle was strengthened by the teacher's own identity of having been a WP student.
- The principle of diversity also drove the enactment of targeting in schools – one school staff member checked the group that had resulted from her partially pragmatic selection process and was satisfied with the diversity on gender and ethnic diversity.
- And there was professionally principled effort to enhance the prospects and achievement of a pupil who did not want to participate and was persuaded to participate in A2D. Closely linked to this principle was the principle of social justice, by targeting disadvantaged pupils that had slightly poorer academic achievement at the time of targeting, but were perceived to have academic potential.

Pragmatics:

- The Project Core Team needed to ensure that A2D as a WP initiative not only launched but was sustained through the activities and engagement of all stakeholders.
    - The Project Core Team made the pragmatic decision to engage with schools with which the HEI had previously developed relationships through other (WP) activities. Equally, if schools did not or could not engage with A2D, the Project Core Team sought other schools to ensure perpetuation of the initiative.

    - In order to ensure perpetuation of the WP initiative and to ensure that targeting in A2D was aligned with the aims of A2D, the Project Core Team created a 'service level agreement' that outlined the nature, functions and process of A2D, how schools could remain engaged with A2D and what targeting criteria the schools could utilise to target the 'right' pupils.
- School liaison staff needed to have a viable way of selecting people and filling spaces.
    - They made judgements about the pupils from their own experience and by seeking input from science teachers and form tutors.
    - One school staff member used a 'race' to get signed parental consent forms handed in as a means of targeting and reducing her own administrative follow-up burden.

Prediction:

- The Project Core Team predicted which schools, known to the HEI, would be willing to engage with the WP initiative and approached these first.
- School staff engaged in efforts to predict who would benefit from and remain engaged with A2D.
    - These efforts underpinned their emphasis on science performance and demonstrating enthusiasm for A2D.
    - These efforts were also related to the principles of social justice, by targeting pupils with slightly lower academic attainment by or persuading reluctant pupils to participate in A2D.

Arguably, the actions of the research participants might not be successful in ensuring that all targeted pupils were the 'right' pupils (see also section 2.9.1 on page 52). As a corollary, therefore, those pupils that were excluded from participating in A2D (*i.e.*, not targeted) might be excluded from receiving appropriate IAG that this WP initiative would provide (discussed previously in subsection 2.6.5, page 38) regarding future progression (whether to HE or to other avenues). This might support arguments, therefore, that targeting should be well-organised at the outset, firstly with guidelines linked to the HEI's vision and policy documents and secondly with a methodology that can realistically fulfil the guidelines and the aims of the WP initiative.

However, a Figured Worlds theoretical lens allowed us to view targeting issues and their enactment as sites of improvisation and evolution. Furthermore, by employing an in-depth case-study methodology, and through the Figured Worlds lens, the mechanisms and strategies employed by the different stakeholder groups were made more visible. It is through an understanding of the strategies employed for targeting and the drivers of these strategies in A2D that this thesis expands current knowledge of targeting, which may enable future research studies to develop targeting methodologies (see subsection 9.4.1, page 215).

Chapter 8. Activities in A2D: Evolution and participant perspectives

8.1. Introduction and background

WP initiatives usually comprise a combination of two or more activities (discussed in section 2.7.3, page 40), including visits to schools (by HE staff and/or students), campus visits for school pupils (in the form of workshops, summer schools, taster days) and peer mentoring. The purpose of school visits is to establish contact with schools and pupils, to provide information, advice and guidance (IAG) and to raise pupil aspirations. Visits to university campuses are seen as a way to provide to pupils, in addition to IAG, first-hand experience of the university environment, and knowledge about particular courses and particular HEIs (Dent *et al.* 2014). Peer mentoring in WP is the relationship that forms between a more knowledgeable individual (HE student mentor) and a less experienced young person (school pupil mentee) (Moore *et al.* 2013). The characteristics (page 45) of a mentoring programme include: defined aims and objectives, identification of the focus of the mentoring (*e.g.*, academic, pastoral role, social engagement), appropriate selection and matching of mentors and mentees, training and support for mentors and mentees, guidance on the structure of the mentoring process and evaluation of the mentoring programme. Furthermore, the process of mentoring is typified by a series of stages (section 2.7.3.3, page 44), briefly summarised as: the ice-breaker stage (which is the introductory stage), the core mentoring stage (when the previously established functions of mentoring are fulfilled) and the consolidation stage (when the mentoring relationship may terminate).

The activities in A2D comprised school visits, campus visits (delivered via workshops) and peer mentoring. A2D was an ambitious initiative, which centred on the development of the long-term relationship between the dental students and targeted school pupils through these activities. The launch and design of the WP initiative was guided, in part, by the political changes driving institutional policy at the time of its launch (see page 132 in section 7.2.1). As a newly formed WP initiative, A2D faced

multiple constraints (discussed in section 8.3, page 186) which led to significant evolution through transformation in function and format of all three principal activities in A2D during the first few years of its inception. The evolution of these activities was not a linear process and there was considerable overlap between the three activities as they evolved.

The initial conception of, and perceptions of participants to, school visits (subsection 8.2.1), campus visits and associated peer mentoring (subsection 8.2.2) in A2D are explored first. Subsequently, the evolution of the intertwined activities of school visits, campus visits and mentoring are explored through participants' views (section 8.3). Reference to conceptualisation of identity development, creation and apprehension of artefacts, agency, improvisation and interpersonal interaction as well as the evolution of the Figured World of A2D is made. Finally, although the boundaries between the nature and function of school visits and campus visits were blurred in the evolution of A2D, these activities are compared for their particular contribution to WP initiatives (section 8.4).

8.2. Initial conception

The programme of activities in A2D included school visits, campus visits and peer mentoring by dental students. First-year dental students were introduced to A2D through an introductory talk by the Project Core Team (labelled in this study as 'Dental Student Talk'), which included an outline of the aims of the initiative and the link to the students' curriculum over the subsequent five years (FN, Dental Student Talk, 2012). Dental students were initially expected to participate in A2D to fulfil the requirements of a compulsory curriculum module of "teamworking, professionalism and social responsibility" (Project Core Team planning document 2012, p.2; reference withheld to preserve anonymity) which would develop through their five-year degree (see subsection 5.1, page 94). Pupils in Years 9-13 were targeted by their schools (discussed in detail in Chapter 7). Compulsory dental student participation in the first year of A2D was deemed possible because "it was put into our timetable" (DS5 C1 Year 3, Yr3 FG, 2015). It was envisaged that cohorts of approximately four to five targeted pupils from each of the eight initially targeted schools would be linked to groups of approximately

eight dental students (approximately 32 pupil mentees and 70 dental students per cohort) for the A2D activities, which were relatively distinct in their function and format and are briefly described below:

- School visits were planned as introductory talks (rather than a core WP activity), designed to introduce school pupils and staff to A2D and to introduce dentistry as a programme of study (effectively, IAG); these occurred prior to targeting of pupils in the initial conception.
- Campus visits were devised as annual workshops (building on IAG) for targeted pupils in the summer term, to enable them to visit the HEI campus, imagine themselves in that environment and to meet the dental student mentors (to begin the process of relationship-building).
- Peer mentoring was to occur within the linked dental student-pupil groups in a ratio of approximately two dental students to one pupil, and the dental students and school pupils would develop the mentoring relationship over the period of the five-year dental undergraduate degree, during annual campus visits and via email communication. The aims of peer mentoring were twofold:
    - to guide the school pupils towards HE choices and,
    - to fulfil the dental students' compulsory curriculum requirements of "teamworking, professionalism and social responsibility" (Project Core Team planning document 2012, p.2; reference withheld to preserve anonymity).

Figure 11 on page 166 next is a diagrammatic representation of the initial conception of activities and their aims in A2D. It also depicts the link between campus visits and peer mentoring.

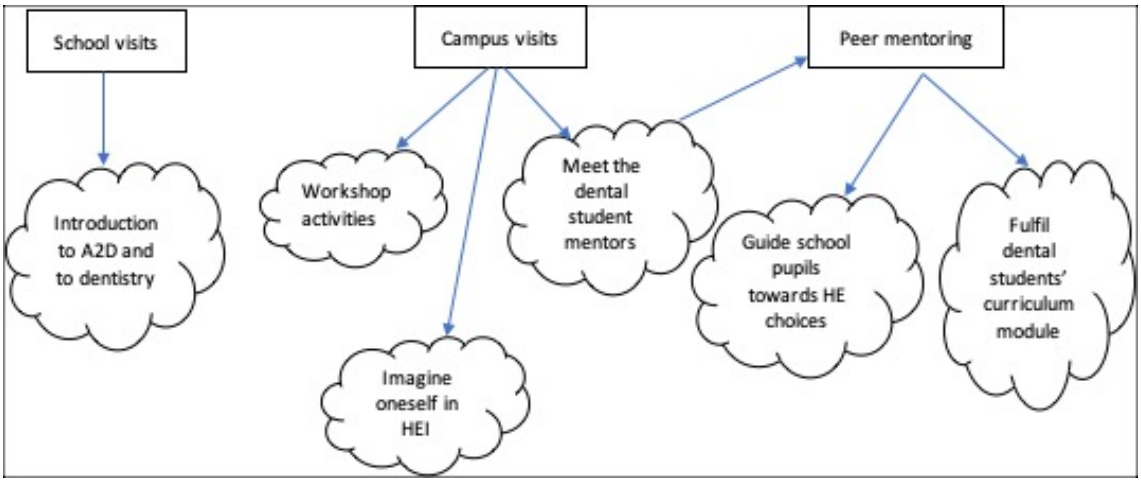

Figure 11: Initial conception of activities in A2D

8.2.1. School visits

School visits (for any Year 8 pupils the school wished to include prior to targeting A2D participants) were conducted by members of the Project Core Team; in the first year, this was a senior Dental School staff member. The first-year dental students accompanied the Project Core Team as student ambassadors for A2D and provided their perspectives in response to pupil queries related to dentistry and the HEI. Pupil numbers for these introductory talks varied from 10 to just under 50 (FN, School visits (various), 2013). During introductory talks, the Project Core Team member presented the HEI's admission requirements for undergraduate dentistry, emphasised the importance of subject choices at school, provided an overview of the work experience required and the entry grade requirements. She also provided a brief course overview and described some advantages and disadvantages of a career in dentistry. The talk was illustrated with tabular data, text and photographic images. First-year dental students provided their perspective on life in HE and on the undergraduate course in response to pupil queries (FN, School visit, 2013).

Staff at schools viewed school visits as important to providing understanding of dentistry as a course and as a career:

> "[…] it [introductory talk at school visit] gives them an insight as to what the course is or what is expected of them later on in life." (SS5 S4, Yr1 Int, 2013)

Another school staff member recognised the informal guidance that school visits delivered through student ambassadors:

> "Very useful. To have students come in. They're often more useful than the lecturers. […] being able to ask questions that are not just about the subject, but about life at university, […] there's kind of their more personal questions about, oh how much money do I need and what will it be like? Will I survive knowing only how to cook a jacket potato, things like that really." (SS6 S4, Yr1 Int, 2013)

The preceding quotes reveal that school visits were fulfilling the aims initially envisaged by A2D; of introducing school pupils to A2D and of introducing dentistry to school pupils, with the help of the HEI staff and students. Similar aims are also described in the literature (section 2.7.3.2, page 43), that is, of HEIs or WP initiatives establishing contacts with schools and pupils and providing IAG – as formal information about the HEI, as guidance on admissions and as informal 'hot knowledge' (Ball and Vincent 1998) from existing HE students. The contribution of A2D in achieving these aims was believed to be important because this knowledge of HE and dentistry, and the guidance, both formal and informal, was felt to be lacking in the other Figured Worlds that these pupils inhabited, as elucidated by this assistant head teacher at one school:

> "Many of these children, their parents have not been to university. So as much as they're like, take for example, Indian parents, they want you to get the A grades, they want you to do well, they want you to go to a top university, they want you to do a top course. But a parent does not necessarily have the ways and the means to support that child to get there." (SS5 S4, Yr1 Int,2013)

The "ways and the means" that the assistant head teacher referred to in the quote above is often described in the literature as the various forms of capital that individuals from WP backgrounds might lack (subsections 2.6.1, page 33 and 2.6.2, page 34). A

careers advisor at another school described the barriers faced by pupils in respect of HE choices, similar to those in the literature (Mocca *et al.* 2019):

> "…there's a very low percentage within our sixth formers' parents who have actually been to university themselves. So, there's a lot of just don't know, and they don't know what they don't know. So therefore, they pick what's comfortable for them. So really, you know, a lot of my work, um, and a lot of [the other school staff's] work, obviously with our sixth form, is about opening their minds, opening what's out there to them and allowing them to see what else is there and then allowing them to choose." (SS3 S2, Yr1 Int, 2013)

The school staff therefore engaged with WP initiatives that HEIs and other organisations offered in order to provide them with these resources. This perception, both in the literature and amongst school or HEI staff in A2D, is predicated upon a deficit approach to WP: individuals from disadvantaged backgrounds lacking the skills and guidance necessary for progression to HE, which can be provided through WP activities. While this deficit approach acknowledges the barriers that disadvantaged individuals face and the steps that organisations take (in the form of WP) to overcome the barriers, it cannot explain the mechanism by which these steps address the barriers. The deficit-laden approach overlooks the agency and actions of the various stakeholders involved in the design, delivery and utilisation of WP activities. It also risks placing pupils in positions of lesser or no power, so that they are passive recipients of WP-related activities. However, focusing on the collective actions of individuals in WP initiatives allows us to shift our gaze away from the pupils' presumed deficit to the social interactional context in which stakeholders in WP initiatives operate.

In a Figured World, artefacts can be created by the behaviour and actions of individuals. Similarly, individuals' behaviour and actions can afford subject positions to other individuals, who can then author new identities in that Figured World. So, in the Figured World of A2D, the "work" by school staff to increase their pupils' knowledge of HE, the organisation of school visits by the HEI and the interactions between dental students and pupils during school visits (as well as campus visits and peer mentoring, see subsection 8.2.2 next) led to the creation of cultural artefacts such as the formal

guidance and information on HE and dentistry, experience of dominant discourses associated with progression from secondary school to HE (*e.g.*, subject choices, work experience, grade requirements) and the informal 'hot knowledge' of current dental students. The creation, appropriation and internalisation of artefacts depends on individual identity and agency, which is built from the individual's history-in-person (see subsection 3.4.6, page 72). Pupils' entry into the Figured World of A2D was encouraged by staff in the Figured World of school who targeted pupils whose history-in-person indicated a need and ability to benefit from a WP initiative (see Chapter 7). School staff enacted agency by "opening what's out there" to the pupils and by participating in WP initiatives such as A2D. New subject positions, as WP participants and as potential HE participants, even perhaps as future dentists or other professionals, were then available to those pupils, which they could then address in different ways.

Dental students' interpretations of activities in A2D were largely aligned with the aims of A2D, that of introducing dentistry to pupils. These first-year dental students were themselves just beginning to develop understanding of clinical dentistry and of university life. The five-year plan of A2D would see them developing towards being qualified dentists at the same time as the pupil mentees were developing towards becoming university entrants. During an introductory school visit, one dental student, like his peers, believed that the school visit had achieved this aim:

> "[…], at first no one wanted to ask questions. They [the school pupils] were very shy about it and as they started, […] they were asking questions about dentistry and forensic science and like, but they were thinking about the careers more after the talk, as people started asking more questions. So, it did look like it was having an impact on them, it wasn't just a boring talk. They were starting to get interested in it [dentistry]." (DS4 C1 Year 1, Yr1 FG, 2013).

He was satisfied that he had contributed positively to the activity:

> "Yeah, um, it [the school visit] was good, the kids, cos I think it was Year 8s, so I think they were a bit intimidated by it, cos dentistry is a very specific thing, so like at that age, to hear about all this dental stuff [might

> have been intimidating]! But it's interesting; the kids did get involved in asking questions about it; it was good to be able to pass on what I think about [dentistry], to them." (DS4 C1 Year 1, Yr1 FG, 2013)

Individuals are recruited into Figured Worlds by virtue of their previous history, by other individuals or as a conscious act by the individuals themselves. This dental student had been recruited into A2D as a result of his particular status (subject position) in the HEI (a first-year dental student in the year that A2D launched). Once recruited, he was positioned by the Project Core Team as student ambassador. This role of student ambassador, of promoting dentistry as an undergraduate course and of describing the experience of participating in HE to pupils, had been explained briefly to the dental students during the Dental Student Talk (FN, 2013). As a student ambassador, this first-year dental student was a novice in the Figured World of A2D. He responded to pupils' initial apprehension, in other words improvised, by drawing upon his experience and relative expertise in the Figured World of dentistry. The specialised discourses and values that made up A2D were internalised by this dental student, and he thus began to claim an identity as an 'expert' ambassador in this Figured World (Holland *et al.* 1998). His (limited but growing) expertise in dentistry then became a cultural artefact available for appropriation by pupils in the Figured World of A2D.

So, similar to the literature (subsection 2.7.3.2, page 43), this dental student provided IAG and realised his role as student ambassador. However, in contrast to the literature, rather than viewing this school visit and interaction as simply fulfilling a perceived deficit for pupils (lack of information about dentistry), the Figured Worlds lens enables us to see the mechanism by which this activity was interpreted and enacted by the dental student. It also allows us to view the interpersonal interaction between the dental student and pupils as a site for individual agency, artefact creation and appropriation, for improvisation and for claiming identity. In the Figured World of A2D, the dental student accepted his subject positioning as student ambassador, interacted with the school pupils, created a cultural artefact for pupils to appropriate, internalised the dominant discourse of the Figured World as it related to this activity and eventually claimed his identity as 'expert' student ambassador. The lens of Figured Worlds has thus

shown us how the seemingly simple role of student ambassador gained significance in the Figured World of A2D.

The dental student's observations provided a glimpse into pupils' agency as well. By navigating through their apprehension and seeking information from the dental students, the pupils began, albeit perhaps tentatively at first, to interact with the Figured World of A2D. We have seen an example of artefact appropriation during interpersonal interaction between dental students and school pupils (subsection 3.4.7, page 73). Let us examine another pupil's reflection on a school visit:

> "I remember they [the dental students] were telling us about that maybe some subjects that you would need to get into dentistry and how dentistry is close to medicine as well. They spoke about like, what they do in university, how they train and yeah, why dentistry is a good career as well." (SP14 S4, C2 Year 10, Yr3 Int, 2014)

This pupil was reflecting on a school visit that occurred over a year before the research interview and she still valued the information from the dental students, further evidenced in her claim that she appropriated it as knowledge of "the subjects I could pick" (SP14 S4, C2 Year 10, Yr3 Int, 2014) for school-leaving examinations in order to pursue dentistry as an HE option. Through her interaction with the dental students during a school visit, this pupil enacted her agency and claimed the subject positioning that was offered to her, that is, she was a continuing participant in the Figured World of A2D. She also interacted with the artefacts in the Figured World of A2D and appropriated them for use in the Figured World of school to help choose subjects for final examinations, which in turn would enable her to enter the Figured World of undergraduate dental education. This pupil was not merely a passive recipient of the information that WP initiatives such as A2D provided. Through her agency, actions and artefact appropriation, she claimed her identity as a participant in the Figured World of A2D; she also carried these artefacts and her identity into the Figured World of school, in order to help her enter the Figured World of undergraduate dental education. The multiple intersecting identities that she possessed were further shaped by her Figured World of home; she said her family encouraged the belief that it was "important that I go to university" (SP14 S4, C2 Year 10, Yr3 Int, 2014). Thus, through her actions related

to the school visit and interaction with the dental student, we see the interaction between the multiple Figured Worlds she inhabited at that time. The multiplicity of Figured Worlds is important for individuals because they serve as sites for future behaviour and as the force for multiple, evolving identities (see subsection 3.4.8, page 74).

The above example, of the pupil enacting her agency and shaping her identity through a school visit, might suggest that eventually, it is up to the pupils to proactively interact with WP initiatives, that is, the onus is on the pupils to effect change in their social circumstance. However, as we shall see on page 175 (subsection 8.2.2.1), it is not an individual's agency alone that is responsible for this change; rather the social interactional context of learning and development of salience is important in the evolution of identities in a Figured World and in the evolution of the Figured World itself.

8.2.2. Campus visits and peer mentoring

Campus visits were initially envisaged with the aim of enabling pupils to gain understanding of life as an HE student (and therefore imagine themselves in that life). They consisted of workshop activities conducted by the dental school staff during the summer term. Campus visits were also the site for peer mentoring: the introductory 'ice-breaker' meeting between dental student mentors and pupil mentees to enable the development of trust and rapport between them, an important step in the peer-mentoring relationship. As we can therefore see, there was an intimate link between the campus visits and peer mentoring in their initial conception. However, a separation between workshops and peer-mentoring in subsections 8.2.2.1 and 8.2.2.2, whilst artificial, is useful to distinguish and understand the mechanisms of each activity.

8.2.2.1. Campus visit workshops

The workshops consisted of a talk by the Project Core Team (reiterating the information provided during school visits); activity stations related to the academic curriculum of the dental students (*e.g.*, blood pressure measurement); a tour of the dental school and lectures by dental school staff. In subsequent years, the workshops would also include subject-specific academic and guidance topics. The academic content would match

topics relevant to the dental students' curriculum (*e.g.,* human health and disease with Year 2 dental student mentors working with Year 10 school pupil groups) while other elements of learning for the pupils would relate to their particular needs (*e.g.*, guidance on securing work experience with the Year 3 dental student mentors working with Year 11 school pupil groups[10]) (FN, Dental Student Talk, C1, Yr1, 2013).

Pupils' perceptions of the workshop activities were mostly positive; they enjoyed the opportunity to participate in the Figured Worlds that dental students inhabited. For at least two pupils, the workshops were the means to get a better understanding of what a course in dentistry entailed:

> "There are really different types of problems with the mouth. And, I also thought that being a dentist only involves the teeth. Now I realise that it's the head. Bones, ears, tongue… yeah." (SP1 S3 C1 Year 9, Yr1 Int, 2013)

> "Oh, we made the silicone models for the teeth and then we did our blood pressure and we did a quiz and that was quite interesting, cos some of the things we never knew before. Yeah, it was fun." (SP3 S3 C1 Year 9, Yr1 Int, 2013)

In other words, the workshops provided the school pupils in the Figured World of A2D with academic know-how that is usually available to (relatively advantaged) individuals through work experience in a dental practice or in a hospital setting as preparation for applying to undergraduate dentistry. The recognition and significance of information as a notional artefact was previously discussed in subsections 3.4.5, page 71 and section 6.3, page 121. Holland and colleagues (1998) suggest that artefacts can carry different meanings in different contexts and for different individuals. This can be helpfully illustrated through the example of the workshop exercise of preparing "silicone models of teeth" (known technically in dentistry as 'impressions'). In undergraduate dental education, this exercise is a practical educational tool that functions to enable the creation of dental restorations for teeth in clinical dentistry. The significance of this

[10] Work experience in a dental setting is an important pre-requisite for admissions to most undergraduate dentistry courses in the UK; potential applicants usually begin to seek this experience in the 2-3 years prior to applying for these courses.

exercise for the dental students in the Figured World of HE is as an artefact that helps them gain expertise for and in the future Figured World of clinical dentistry by successfully passing assessments linked to this exercise. In the Figured World of A2D, however, the significance of this exercise for the dental students lay in its ability to indirectly enhance communication with the school pupils (see subsections 6.2, page 120 and 6.3, page 121) and, as we shall see on page 180, as an 'ice-breaker' in the related activity of peer mentoring. For the pupils in the Figured World of A2D, this exercise, as an artefact, was designed to provide a glimpse of the academic content of undergraduate dentistry. The significance of this artefact for pupils was thus as a mediating tool to enable salience (further discussed on page 175) with the Figured World of dentistry.

Like school visits, campus visits in A2D were fulfilling the aims of the WP initiative, that of equipping pupils with information about dental education and enabling pupils to imagine themselves as HE participants. School staff valued campus visits for their utility in allowing pupils to visualise themselves in and becoming familiar with a university environment:

> "That's what we want our students to see, we want them to be visiting universities, we want them to be stepping into universities at a young age." (SS5 S4, Yr1 Int, 2013)

Pupils understood the importance of being able to imagine themselves in HE through campus visits:

> "But then, like, it's definitely … about the experiences so, like, it's all good to go and check out the uni too, like you see how uni is, how it feels, how it will be when you grow up." (SP2 S3 C1, Year 11, Yr3 Int, 2015)

The school pupils enjoyed the experience of visiting a university campus, as a day out of regular school, although some that had not previously visited a university campus were surprised by the scale of the HEI environment:

> "It was really like, shocking, because the environment is different from here [school]. Like, here you have your friends, and you're in like a little

> classroom when you're learning, but there [at the HEI] it's like people you don't know in a massive lecture room, and it's just like a very new environment." [SP19 S3 C2, Year 10, Yr3 Int, 2014]

Campus visits and the interpersonal interactions were also helpful in dispelling myths about life as an HE student. For one school pupil, the workshop allowed him to envisage a future life that was not exclusive of his existing social structure:

> "I expected them [the dental students] to talk to us about dentistry, but not like, it wasn't just all about dentistry. They said it's good to go to uni. You don't have to do, like, dentistry. You could do other things. It doesn't really separate you from, like, the rest of your life, like your social life and family." (SP9 S2 C1 Year 9, Y1 Int, 2013).

So, from these quotes, we can see that campus visits were performing different functions for different individuals: familiarity with a new environment, context for future imaginings, exposure to life on a university campus and dispelling myths about university life. The benefits of campus visits have also been described in the literature (section 2.7.3.2, page 43) where, similar to the literature on school visits, campus visits are seen as the means to overcome the deficits experienced by disadvantaged individuals. The premise taken by the extant literature is that campus visits fulfil their role either because of the characteristics of the visits (provide IAG, enable future imagination or raise aspiration) or because of the characteristics of disadvantaged individuals (possess aspirational capital, enact agency). A Figured World lens adds to current understanding of benefits of campus visits by suggesting that the motivation to inhabit a Figured World is developed in the recurring social interaction within that world. An individual personalises and adopts the cultural practices of a world through social interactions. By adopting the practices, the individual is motivated not just to take on the practices, but to "attend to and value the experience" (Holland *et al.* 1998, p.100) of that world. So, it is not just because of the characteristics of WP activities, and it is not just because the pupils have certain characteristics, rather it is because the pupils (who are novices to the Figured World of HE) interact with the Figured World of A2D and it is this interaction that encourages them to develop salience with the Figured World of HE (subsection 3.4.7, page 73). Eventually, this salience shifts towards expertise in a Figured

World; this shift is marked by the embodiment of the rules and cultural practices of that world into one's identity, sense of self and behaviour.

The pupils in the quotes above developed early salience in three ways: by imagining themselves in HE ("how it will be when you grow up"), by understanding the differences between the HEI and school ("the environment is different from here") and by recognising that enacting the cultural practices of the Figured World of HE would not exclude him from the Figured World of home ("it doesn't really separate you from, like, the rest of your life"). The three pupils appropriated different cultural tools or artefacts in developing this salience: future imagination, recognition of differences and interpersonal interactions with HE students. Yet, all three pupils developed a degree of salience with the same Figured World. An important point is to be noted here is that recognition of salience is not the same as homogenising the salience developed by different individuals. Different individuals develop greater or lesser salience and therefore greater or lesser expertise in Figured Worlds. For example, we will see later that for one pupil, the social interaction in A2D led to greater expertise within this Figured World and, through her agency, she embodied the cultural tools of this world and appropriated them for future use in the Figured World of HE admissions (page 201). On the other hand, if, during their recurring social interactions, pupils did not develop salience with the Figured World of A2D, they would reject the notion of themselves as future dental students. This concept can be demonstrated through an example. During the first year of A2D, a pupil described finding the campus visit and workshop activities useful in enabling her to consider dentistry as a possible HE and career option:

> "Researcher: Okay. Alright, and what do you think about dentistry now that you've been on this workshop and met the dental students, been on the tour?
>
> SP6 (pupil): Umm, I think it's something that I would be more open to and actually look into it and see if I want to do it
>
> Researcher: Okay, and have you looked into it?
>
> SP6 (pupil): Not really before this, I didn't know much about it. So now I have a better understanding." (SP6 S4 C1 Year 9, Yr1 Int, 2013)

At a research interview in the following year, she explained that her views on this course had changed following a subsequent campus visit and workshop activity:

> "It made me feel that dentistry is very hard (both laugh); yeah, it put me off it" (SP6 S4 C1 Year 11, Yr3 Int, 2014)

Here we see the evolving perspectives of this pupil towards dentistry; we also see her agency in the Figured World of A2D: first in accepting the subject positioning as a mentee and subsequently in rejecting this positioning. What would the rejection of this subject positioning mean for the pupil, for the WP initiative and for the HEI? For the pupil, viewed from a Figured World perspective, her agency was instrumental in first allowing her entry into the Figured World of WP and dentistry. Through her interactions with other participants and with activities in A2D, she was able to again enact agency, appropriate the information she had gained in this Figured World and then perhaps author a newer or slightly different identity, for example that of a potential HE student on a different course. In this way the A2D WP initiative could be a bridge to the wider Figured World of HE, not just to the Figured World of undergraduate dental education. A2D could also be a bridge to other Figured Worlds, for example, vocational training. So, for the WP initiative and for the HEI, rather than amounting to failure of targeting or of campus visits, the Figured World lens allows us to view the interactions and individual agency as facilitating the development and evolution of multiple interacting Figured Worlds and the development of potential identities in other Figured Worlds, such as other HE courses or vocational training. It is not within the remit of this thesis to explore the other Figured Worlds that the study participants might have inhabited.

8.2.2.2. Peer mentoring

Closely intertwined with the activities in campus visits (as workshops and talks) was the third principal activity in A2D: that of peer mentoring. The Project Core Team envisaged that the long-term relationship between the dental students and school pupils (over the period of the five-year dental undergraduate degree of the dental student mentors) would form a crucial component of the WP initiative. Training and support would be provided to the dental student mentors by a professional mentoring charity. After the first year, the charity was not operational and for a short period, as the WP initiative

evolved (subsection 8.3.1) there was no clear evidence of training support for the mentors. We shall see on page 204 that, as mentoring evolved further, training of the dental student mentors was subsequently undertaken by the Project Core Team.

Two characteristics of mentoring programmes, as they are described in the literature (page 45), were not clearly evident in A2D in this initial conception. A *clear structure for the mentoring process* could not be identified in the documents associated with the WP initiative, although a broad overview of the process was given to dental students and to the school pupils and staff during introductory talks. *Mentor and mentee selection or matching* was not based on particular characteristics of the individuals (dental students and school pupils) at the outset, at least partly because of the issues related to targeting mentee pupils discussed in Chapter 7. However, in the initial conception at least, the other characteristics of a mentoring programme were evident: there were broadly defined *aims and objectives*; the *focus of peer mentoring* was academic and pastoral support, by nurturing the long-term relationship between the dental students and school pupils; there was *planned training and support for the student mentors* and the *evaluation of mentoring* was to be conducted in line with the HEI's evaluation strategy for A2D (pages 96 and 137).

Participation by dental students in A2D at this stage, particularly as mentors, was compulsory as a core curriculum module, but a dental student noted the lack of enthusiasm amongst several of his peers and believed that only a select group of the dental students would participate:

> "I think it's gonna be just a few of us that are… I don't think everyone will take part (murmurs of assent from the rest of the focus group). I think people that turned up this week will be the ones that turn up throughout the years." (DS4 C1 Yr1 FG, 2013)

This prediction by the dental student was realised in subsequent years, when dental student participation became voluntary (see subsection 8.3.1, page 191). We have already seen how salience, identification and expertise develops in a Figured World (page 175). Salience develops differently for different people and is determined by the social interaction in a Figured World. In a cyclical fashion this salience, in turn,

determines the degree of participation of different individuals in a Figured World. So, dental students that developed salience with, and expertise in, the Figured World of A2D would continue to participate as mentors and ambassadors in subsequent years. The social interactions that led to the development (or not) of this salience might stem from other Figured Worlds (*e.g.*, previous satisfactory experiences as peer mentors (page 122)), experience in the Figured World of undergraduate dental education which supported dental students to calibrate the importance of participation in A2D, or from the Figured World of A2D itself, such as the interaction with the mentoring advisor (which was not considered helpful by the dental students), discussed next.

Training on mentoring for the dental students was provided in the first year by an external charity, whose representative introduced how the charity conducted peer mentoring for young people from disadvantaged backgrounds, the support that the charity provided to mentors and mentees and safeguarding concerns (*e.g.*, signs of abuse) that mentors were asked to look out for (FN, Mentoring Talk, 2013). However, the dental students felt that the talk was not aligned with the aims or the nature of mentoring required for A2D and they struggled to identify with the topics that the mentoring representative was discussing:

> "There was a load in [the talk] actually, that we didn't know, like, because we… although we knew kind of what we were doing [in A2D], we hadn't really done it yet, so we didn't know what to ask [the mentoring representative], and she didn't know what to tell us because she didn't know what we were doing. So, after her talk, after 10 minutes, it just kind of fizzled out (laughter and nods of agreement from the others)." (DS5 C1 Year 1, Yr1 FG, 2013)

So, from the dental students' perspective, the training session did not provide them with the guidance they had expected in order to support them with mentoring school pupils. This became particularly significant in light of the dental students' improvisations in their interactions with the school pupils during the 'ice-breaker' meeting (see page 180).

The social interaction between the dental students and mentoring advisor also risked deterring the dental students from developing the salience needed to fully participate

in the Figured World of A2D. Why, then, did some dental students actively participate in A2D, while others did not? Holland and colleagues (1998) suggest that novices to a Figured World act at first in accordance with the rules created by others in that world. Through the social interactions and participation in the cultural practices of the Figured World, novices develop salience and become experts (see subsection 3.4.7, page 73). They do this through their agency, by organising their own sense of self (their identity) and by devising their thoughts and actions in the Figured World. Those that do not develop the salience might not participate in the Figured World. Whilst the social interaction with the mentoring advisor did not in itself provide salience for the dental students, some, who subsequently participated in school visits (see subsection 8.2.1, page 166), did develop salience with the Figured World of A2D through their actions and, as we have seen on page 169, became experts in the Figured World of A2D. This expertise (*e.g.*, identity as a student ambassador during school visits) and the ability to act by devising their own actions (agency) enabled some dental students to continue to participate in A2D.

During the campus visit, the dental students and school pupils met and interacted with one another through the workshop activities and 'meet the mentor' small-group sessions. In this way, the campus visit served to function as the 'ice-breaker' stage of peer mentoring, *i.e.*, when mentors and mentees meet to initiate the mentoring relationship (see page 46). The dental students recognised the broad aim of peer mentoring, to enable school pupils to consider dentistry as an HE option:

> "I thought it's a really worthwhile initiative, […] trying to get people, who might not have the opportunity, to enter dentistry, to open their eyes to it, and maybe encourage them if they think that's something that they're suited to and they want to do" (DS1 C1 Year 1, Yr Int, 2013)

During the small-group sessions, which served as the 'ice-breaker stage', dental students engaged in informal conversation with the school pupils. Referring back to section 6.2, page 120, we have seen how the dental students improvised and changed their communication strategies in an effort to engage with the mentee pupils. This improvisation produced an artefact (a modified approach to communicating with mentees) which the student mentors could use and recommend to their peers in this

Figured World. The improvisation (her modified communication style) was recognised by other individuals from the HEI:

> "About yesterday, about the dental thing, I found that as I went along, I think it was really good at developing people skills that we're gonna need as well, because as I went along, cos I was at the same station doing, the impressions, and I just had a different pair of people each time, and each time, like I got better at speaking to them, explaining it to them, I felt more confident as I went along. And [the dental technician[11]] was, like watching me and commented, like, yeah I felt like you were more confident at the end, like with your last group you were more comfortable talking to them." (DS2 C1 Year 1, Yr1 FG, 2013)

The dental student recognised that the artefact ("developing people skills") also had the potential for use in other Figured Worlds inhabited by the mentors: rehearsal and success with the strategy of adapting communication style to enhance the engagement of another person could be regarded as a core clinical skill in the Figured World of providing healthcare. Despite their improvisations and what they perceived to be benefits of the campus visit for themselves, some dental students felt that they had not succeeded in engaging the school pupils as fully as they hoped:

> "I don't know if it was what I was expecting, um, […] I was a bit disappointed that we weren't able to get, maybe as much, like, to get them [the pupils] engaged as I was hoping" (DS3 C1 Year 1, Yr1 Int, 2013)

Another dental student suggested that the lack of engagement by the pupils may have been because of the nature of the activities. She believed that the small group format was intimidating for some pupils and recognised the importance of choosing the right activity for developing the mentor-mentee relationship:

> "I think it might have been better to have something to do with them, sort of break the ice a bit, and then, you know, try and have that

[11] A member of staff from the dental school, overseeing the activity.

> conversation [giving more information about dentistry].” (DS5 C1 Yr1 FG, 2013)

The use of practical activity sessions to “break the ice” was also recognised by another dental student:

> “I think it’s quite good to have the hands on, like the dental materials, and the anatomy, that is some dentistry that gets them interested” (DS4 C1 Year 1, Yr1 FG, 2013)

The series of quotes and reflections by the dental students above highlight the complex mechanisms that shape the development of the mentor-mentee relationship. The Project Core Team predicted that the meeting between the dental students and school pupils would be sufficient to forge the mentor-mentee relationship, thereby serving the “ice-breaker” function (see page 46) of this meeting. In that sense, this meeting was significant as an artefact for the Project Core Team to enable successful perpetuation of peer mentoring in A2D. Some dental students did appropriate this meeting as an artefact to establish the mentoring relationship and focused on improvisation with their communication style to engage the pupil mentees. Others focused on the significance of the practical workshop activities in achieving the same goal of initiating this relationship. We have already seen on page 173, other examples of the different meanings attached to the A2D practical activities by dental students and pupils. Thus, the practical activity was appropriated differently by different individuals who assigned different meaning to it, thereby shaping their interpersonal interactions.

This interaction between artefacts and their meaning in different Figured Worlds can be demonstrated with the help of Figure 12 below, which also illustrates the artefacts that enabled the ice-breaker stage and the multiple meanings assigned to the artefact of the practical activity, which was interpreted and enacted by the different groups of participants:

Figure 12: Interrelationships between the ice-breaker stage, artefacts and other features in intersecting Figured Worlds

This diagram shows that the goal of 'ice-breaking' was shaped by two artefacts: the initial meeting between the dental students and school pupils and the joint practical exercise of making a silicone 'model' (dental impression). The artefact of practical exercise, in addition to serving as an ice-breaker for dental students in the Figured World of A2D, also served as an educational and clinical tool in the Figured World of clinical dentistry for them; and as a means for the pupils to develop understanding of dentistry through the Figured World of A2D.

Pupils anticipated the benefits of future interactions with dental student mentors differently. For example, some hoped to use the interactions to obtain information about HE choices:

> "… I think if I had the mentor […] from university, then I think they would be […] helping me to decide if I want to do dentistry or not […] because it

> would be from someone who had experience [of] going to university" (SP5 S4 C1 Year 9, Yr1 Int, 2013)

Others focused on the value of building relationships with the dental students through the process of long-term mentoring, in a manner similar to that envisaged by the Project Core Team:

> "… if we're with the same student for the whole time, that are in the university, you are sort of building a relationship with them" (SP19 S3 C2, Year 9, Yr1 Int, 2014)

Pupils also interpreted the interpersonal interaction in recognising the similarities between the dental students and themselves:

> "Yeah, it was good, it was, uh, nice to see what, like, they thought of it, as well, cos like, they're all quite positive, but most of them didn't really know what they wanted to do, like I did, like I do, and it is quite nice, cos like a couple of them were like, sort of like me, where I've always wanted to take football and stuff like that and then, they've just like, gone into it [dentistry] somehow. It's quite good to know that." (SP10 S2 C1, Year 10, Yr2 Int, 2014)

As designed by the Project Core Team, initial meetings were intended to foster the mentor-mentee relationship so that goals and expectations of the relationship could be formalised. However, there was little discussion of the goals and no formal discussion of expectations for the conduct of the mentor-mentee relationship. Nevertheless, these goals and expectations of peer mentoring in A2D were broadly expressed by the Core Team as guidance towards HE choices, including dentistry, in their planning document and in the introductory talks at schools and to the dental students. It would appear then, that the goals and expectations of the conduct of the mentor-mentee relationship were implicitly formalised *before* the actual 'ice-breaker' meeting through the introductory talks. This conception was endorsed by the dental students (see page 180). The pupils in the quotes above articulated their expectations of peer mentoring as means to obtain information about HE choices, (through) building of long-term relationships and (through) learning about near-peers' (the dental students) educational journeys to HE

participation. So, in the Figured World of A2D, pupils recognised and appropriated "identifiable social discourses" (Holland *et al.* 1998, p.272), such as obtaining information about HE choices from dental students "who had experience [of] going to university". They also positioned the dental students as mentors with whom they hoped to develop a fruitful relationship. As a result of this positioning, the pupils also recognised the dental students as significant figures that they could relate to ("sort of like me"), and whose prior experiences enabled the pupils to develop salience (see page 175) with the Figured World of A2D. Thus, the dental students' subsequent HE participation created possibilities for the pupils to imagine new possible selves as HE participants. It also created possibilities for the dental students to share their new expertise in the Figured Worlds of HE and dentistry with their mentees over their five-year relationship. By providing pupils with a context of meaning for the actions and interpretations of the dental students in the Figured World of HE, the Figured World of A2D provided a bridge to the Figured World of HE.

School staff recognised the importance of peer mentoring for targeted pupils, and the value they ascribed to this activity was further suggestive of the bridge that the Figured World of A2D would create to other Figured Worlds. The careers coordinator at school S3 believed that the skills the targeted pupils would gain would be transferable to other contexts:

> "Yeah, it's true, if you think about the skills that you're giving them […] inviting them to [the HEI campus] as well as pairing them up with a dentistry undergraduate, they will get so many transferable skills from that, and it may be that the genuine WP students, maybe some of them don't want to do dentistry by the end of it. But they will have gained the skills to succeed at university and to use for other things. So, from our point of view, even if zero applied to dentistry at the end, we know that you would have helped get students to university." (SS4, S3, Yr1 Int, 2013)

A careers advisor at another school believed that peer mentoring and participation in the activities of A2D would bring indirect benefits to their non-targeted peers at school:

> "Yeah, and I'm really excited to see these pupils that will be selected, kind of go through this process, it will be quite an amazing thing, because the effect won't only be on them, it will be on their peers hopefully." (SS3 S2 Yr1 Int, 2013)

A Figured Worlds lens enables us to see the agency of the school staff in appropriating the notional artefacts from the Figured World of A2D not only for targeted pupils beyond the Figured World of dentistry ("they will have gained the skills to succeed at university and to use for other things"), but also for other, non-targeted pupils in the Figured World of school ("the effect won't only be on them, it will be on their peers hopefully"). Although the careers advisor did not elaborate on the mechanism for this expansion to non-targeted pupils, a science teacher at another school (S5) had expressed a similar view towards campus visits. She recalled that in the previous year, targeted pupils who had visited the HEI campus workshop were "buzzed" enough by their experience of the summer workshop that they were still talking about it when the new academic year started a few months later, and that their excitement had enthused other pupils from their year group to learn about A2D and to participate in similar events (FN, Campus Visit, 2017). Jackson and Price (2019) refer to this effect as "implicit mentoring" (p.100) or hidden mentoring, when formally mentored pupils' experiences and discourses serve to guide their non-mentored peers through informal discussions. Figured Worlds have the liberatory potential to allow individuals to open up possibilities of, and therefore identities in, other Figured Worlds; such as Figured Worlds of other WP initiatives. By discussing the workshops of A2D with their peers, the pupils enabled possible subject positions for their peers, as participants in Figured Worlds of other WP initiatives.

8.3. The evolution of activities in A2D

In the preceding section, we have seen that in the initial planning of A2D, school visits were conceptualised as a verbal and visual introduction to A2D for Year 8 pupils. Campus visits, workshop sessions and peer mentoring were delivered by dental students, whose participation in A2D was compulsory. However, schools were not bringing in all targeted pupils for all activities or were bringing different pupils to different activities, often because of staff shortages or other school commitments. The Project Core Team was

concerned that compulsory participation by dental students in A2D would be difficult to sustain and that the planned pairing between dental student groups and school pupils would not be delivered by the initiative (FN 2014). Furthermore, the first cohort of dental students, who were now in their second year, were participating in increasingly intensive academic and clinical commitments and were therefore unable to fully engage with A2D. The Project Core Team also struggled to recruit HE staff for the multiple school visits. As a newly formed WP initiative, A2D thus faced multiple constraints which are outlined below:

- Those resulting from schools' own constraints (such as lack of resources or competing priorities) leading to dwindling and inconsistent school participation
- Those within the HEI, including:
    - Lack of dental student engagement as a result of their competing clinical and academic commitments
    - Difficulty recruiting HEI colleagues for multiple school visits.

The initiative therefore underwent evolution in the design and delivery of its three principal activities: school visits, campus visits and peer mentoring. Although these activities were relatively distinct in the initial conception, and therefore were discussed separately in the preceding section 8.2, the modification of these activities led to a blurring of the boundaries between the three, particularly in Years 2 and 3 of A2D, when successive WP officers worked in the A2D Project Core Team (PCT2 in Year 2 and PCT3 in Years 3-5). Furthermore, the modifications were largely dependent upon the agency and the actions of these WP officers who became key figures in shaping the evolving the Figured World of A2D. The first WP officer, PCT2, made the following modifications:

- School visits were modified from their function as introductory talks (prior to targeting of pupils) to workshop activities and peer mentoring sessions for targeted pupils.
- The introductory talks for non-targeted Year 8 pupils from all targeted schools were held on the HEI campus.
- Campus visits for targeted pupils continued as before, with activity sessions and interactions with dental students.

- Participation by dental students became voluntary, sought via email requests by the Project Core Team. Medical students were also invited to participate in A2D from Year 2 onwards, when the initiative expanded to include medicine (see page 94).

These evolving activities are depicted in Figure 13 below, which, when compared with Figure 11 on page 166, shows that, while campus visits remained largely unchanged, apart from the addition of the introductory talks to Year 8 pupils, school visits and peer mentoring underwent the greatest evolution. Peer mentoring, which was initially closely linked to campus visits, was conducted during school visits, and was delivered as guidance for academic preparation or for future HE progression.

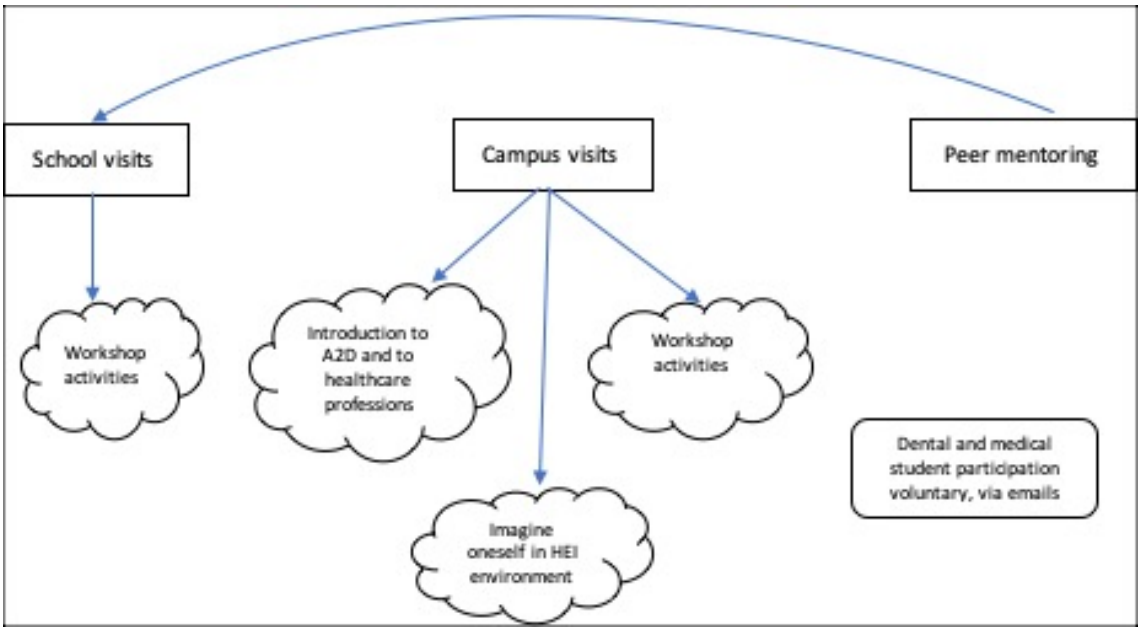

Figure 13: Evolution of activities through actions of PCT2

The second WP officer, PCT3, who succeeded PCT2 in the following year (Year 3 of A2D), further modified the activities in A2D:

- School visits continued as activity sessions, and supplemented the annual campus visit for Year 11 pupils, who could not attend campus workshops due to examination commitments.
- Introductory talks for Year 8 pupils continued to be held on the HEI campus (and changed such that they were delivered as an introduction to both dentistry and medicine).

- Peer mentoring was delivered almost exclusively through a secure online mentoring platform, for Year 12 pupils, with a small face-to-face component at the beginning and at the end of the mentoring process.
- Campus visits (in the summer term) continued as before for most cohorts, with two exceptions:
    - Year 11 pupils were not invited for campus visits; instead supplemented firstly, by annual school visits and secondly, by an additional campus visit earlier in Year 12.
    - The introductory 'ice-breaker' stage between mentors and mentees was held only for Year 12 pupils (during their second campus visit) in order to match the newly redesigned peer mentoring schedule.
- Participation by dental (and medical) students in school visits and campus visits became voluntary. The Project Core Team sought volunteers via email requests to the relevant undergraduate student groups.
- Participation in peer mentoring also became voluntary. All volunteers were accepted in the first year of this change (Year 4 of A2D). In later years students completed an application process to become a peer mentor.
- Parents' events on the HEI campus were added to enable parents to see this and imagine their children in the HEI environment.

The evolution of activities through the actions of PCT3 are depicted in Figure 14 below and should be compared with Figure 11, page 166 and Figure 13, page 188. Here, we can see that the breadth of activities offered by A2D had increased, incorporating supplementary activity sessions in schools, a new parents' event and the introduction of electronic peer mentoring:

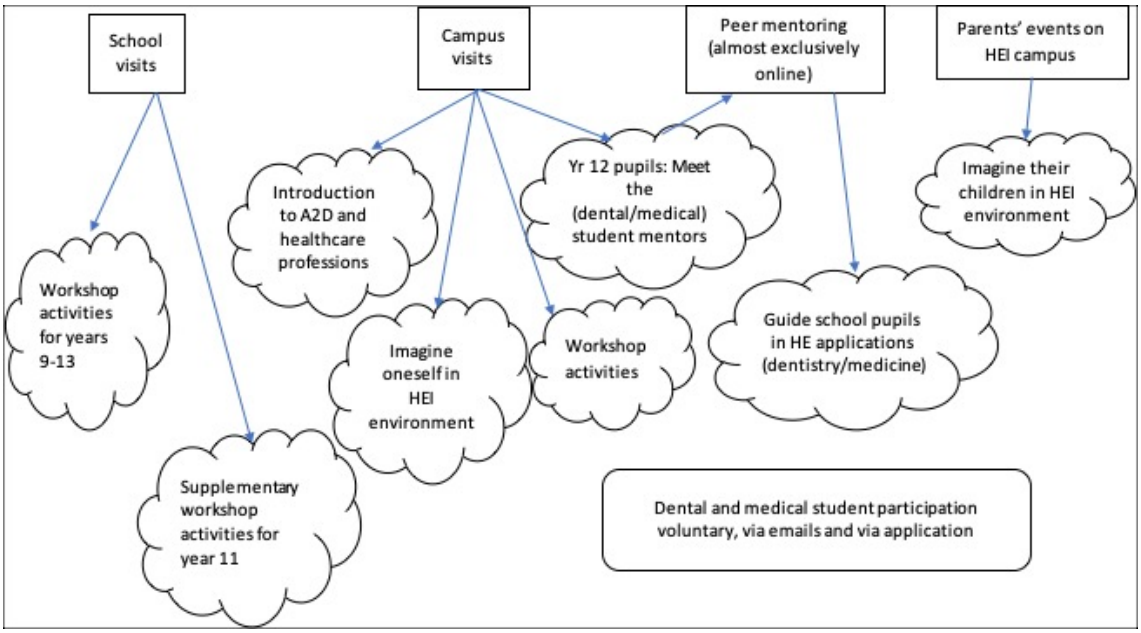

Figure 14: Evolution of activities through actions of PCT3

In order to enable the flow of the evolving story of A2D, this section follows the evolution of the principal activities shaped by the actions of the two WP officers and the perceptions of the participants in relation to these modifications. It is worth noting here that from the Year 4 of A2D, when research participant PCT3 introduced modifications to the WP initiative, primary data collection for this thesis (from the school pupils, school staff and the dental students) had ended. The Project Core Team continued to provide narrative data through brief conversations, research interviews and email exchanges, and documentary data such as A2D reports and artefacts generated to support A2D activities (section 5.3, page 102). It is therefore acknowledged, as a limitation (see subsection 9.7.3, page 231), that any perceptions from A2D Year 4 onwards are mainly those of the Project Core Team (coupled with observations from my field notes); that any perceived effects on the other study participants are discussed through the voice of the Project Core Team (the WP officer and documents generated by the Project Core Team) and that these views may not be a true representation of the diverse groups of stakeholders. Nevertheless, the evolution of the initiative is traceable, and it is possible to draw some measured inferences from the findings.

8.3.1. School visits evolved in function and format

School visits were conceptualised as a verbal and visual introduction to A2D for Year 8 pupils and not designed as workshop-type activity sessions. However, in the second year of operation, the Project Core Team in the Figured World of A2D faced multiple and complex structural constraints, described in the subsections that follow. These, together with the institutional policy requirement to deliver this WP initiative, led the Project Core Team to improvise its approach to school visits and introductory talks:

- Introductory talks for all Year 8 pupils prior to targeting A2D participants were held on the HEI campus, not at each school (subsection 8.3.1.1)
- School visits were redesigned in their format as workshop activities to supplement campus visits and were no longer the sites for introductory talks (subsection 8.3.1.2)
- School visits were also modified to function as sites for peer mentoring in the form of guidance for academic preparation or for future HE progression (subsection 8.3.1.3)

8.3.1.1. Introductory talks were held on HEI campus

In Year 2 of A2D, dental student participation proved difficult to sustain because of their competing academic and clinical commitments. The Project Core Team struggled to recruit HE staff for the multiple school visits. These operational constraints within the HEI meant that school visits could not be organised in the same way that had been initially envisaged by the Project Core Team (FN 2013, 2014). Furthermore, some schools could not participate in the multiple opportunities for interacting with the HEIs owing to constraints such as lack of resources, staff shortages, staff changes, examination commitments and other competing priorities. Some constraints were anticipated by the Project Core Team, which launched A2D in response to the changing political agenda at the time (see page 132 in section 7.2.1) and expected to adapt the design of the initiative in response to feedback and experience (FN, 2013, 2014). In response to multiple constraints and to ensure the perpetuation of A2D at this early stage in its evolution, introductory talks (for Year 8 pupils), which were previously designed as individual school visits, were subsequently held on the HEI campus as a single event for all schools.

Dental students were not invited to participate in this activity (FN 2014). The modification lessened the burden on the Project Core Team to commit to visiting multiple schools for introductory talks and to recruit busy dental students as ambassadors. Arguably, this shifted a substantial proportion of the work and resource-use associated with gathering individuals for the introductory talk from the HEI to the participating schools and pupils. However, provided this did not reduce participation in A2D, the experience of visiting the HEI arguably offered a more impactful experience for the school pupils, offering greater potential to begin to develop salience with the Figured World of HE. On the other hand, lack of contact with dental students may have reduced the salience of the activity, thereby limiting the extent to which the pupils began to author potential future identities as HE students.

The modification of this activity also led to dental student uncertainty about their participation in A2D, as they later reflected:

> "Yeah, it was something I was really excited about, when we had the [campus visit and school visit] days, and you go up to the kids [pupils] and it was all really exciting, […] and it all just stopped, and it just seemed there was nothing after that, which was a shame, because it was really interesting" (DS5 C1 Year 3, Yr3 FG, 2015)

> "It did kind of seem that they didn't want us to do it anymore. (everyone laughs). Yeah, so I didn't think that the project was running for our year anymore, pretty much." (DS3 C1 Year 3, Yr3 FG, 2015)

While the lack of communication with the dental students risked disengagement of this group of individuals with A2D, the Project Core Team's improvisation of modifying the location (and therefore numbers) of introductory talks ensured that the Figured World of A2D was sustained and perpetuated at least for that year.

8.3.1.2. Introductory school visits became interactive workshop activities

In order to meet the complex needs of this evolving WP initiative, towards the end of Year 2 of A2D, a WP officer was appointed (participant PCT2). Meanwhile, some dental students had expressed a desire to visit schools regularly and work with the pupils:

> "… we can go out and help them with their work and revision techniques or stuff like that, rather than just trying to get them into dentistry, just like, just trying to help them generally, with all their schoolwork and stuff." (DS5 C1 Year 1, Yr1 FG, 2013)

This reflection at the Focus Group interview led the dental students to discuss in some detail their own perceptions of the WP initiative and the ways that they could actively contribute to it. As a researcher, although my role in this focus group was as an observer and moderator, I suggested that they could email suggestions to the Project Core Team. In that sense, I too had been recruited into the Figured World of A2D and my interaction with the individuals in A2D had provided an impetus for change (see section 5.5, page 111 and subsection 9.7.3, page 231). Following that first Focus Group interview, the dental students emailed suggestions, mainly related to school visits, to the Project Core Team (FN, 2013). Individuals interact with, and attach emotional significance to a Figured World, thus developing their identity (see section 6.4, on page 123). These dental students attached emotional significance to the Figured World of A2D and developed salience in this world (see page 178). By emailing the Project Core Team, they employed their agency and their actions shaped their identities within this Figured World.

School visits were modified from introductory talks to workshop-type activity sessions to supplement campus visits and as mentoring sessions for targeted pupils. To ensure that a reasonable number of HE students participated in the activities, the WP officer emailed multiple year groups of dental (and medical) students, including the first cohort of dental students who were, by then, in Year 3 of undergraduate dentistry, inviting interest and participation in A2D, specifically for visiting schools. She adopted the dental students' suggestions to allow them to visit schools and guide the targeted pupils in their academic preparation or in preparation for future HE progression.

> "… from this year on, we're also hoping to include visits – well, we are going to include visits to schools, so students from [the HEI], medical and dental students are gonna go to schools to run sessions with [pupils] that are taking part." (PCT2 Yr2 Int, 2014)

In accepting the suggestions of the dental students to "run sessions" with targeted pupils, the WP officer had improvised and positioned the dental students as significant figures in the Figured World of A2D, whose actions were responsible for shaping the world and for its evolution: they would work as mentors and student ambassadors, supplementing educational workshop-type sessions on campus with those in schools. She had also improvised the nature of student participation in response to reduced dental student availability because participation in A2D by the dental (and later, medical) students was now voluntary. A further motivation for the improvisation of school visits was to engage the schools in this initiative, particularly in the early years, when faced with dwindling school participation (discussed in subsection 7.2.2, page 134). The WP officer, PCT2, and the Project Core Team recognised the constraints faced by the schools – lack of resources, staff shortages, staff changes, examination commitments, other school commitments – and, working in partnership with the schools, modified the initiative to support the needs and concerns of the schools.

> "So, with us going into the schools as well will be good, cos it shows [the HEI's] commitment to it, in that we're also willing to travel up to where they are rather than always wanting them to come to us." (PCT2 Yr2 Int, 2014)

The improvisations described above thus not only maximised engagement by different stakeholders, but, through the evolution of the Figured World, ensured that the Figured World itself could be sustained and therefore perpetuated.

School visits, in their new format, included a 'Timetable Bingo' game designed to demonstrate to pupils a typical weekly academic routine while studying undergraduate dentistry, a practical activity – the demonstration of Cardiopulmonary Resuscitation (CPR) and a question-and-answer session. A dental student explained the 'Timetable Bingo':

> "So, at this session we went and […] we had like a timetable, we were like: So, what do you think a week of a dental student would be and fill that out. And they just had like different individual bits of paper [each indicating a learning session]: lecture, self-directed learning, a seminar,

> different things like that, so we went through and explained what everything was, and then they made a timetable of what they thought our week would be. And then, we basically played Bingo [the game] so we would pick out one and if they had it on their day would take it off, so the first person who cleared their day would get Bingo, to make it a bit fun. But I guess it still had a lesson behind it about what uni life is like. So there was a range in [understanding] on that, I felt, because a lot of students who are a bit serious about it, they knew what lectures were, or they were working out strategically, whereas others were kind of like, meh [makes a sound to indicate boredom], do you know what I mean?" (DS7 C1 Year 3, Yr3 FG, 2015)

The question-and-answer session was designed to encourage interaction between the dental students and the pupils and to encourage pupils to seek information about the HEI and about dentistry from the pupils, effectively, IAG.

> " […] and then, after [the CPR session], it was like, open to questions, so the students would just ask us questions if they had, or if they didn't have questions, the teachers would just step in to encourage conversation and then they start kind of asking personal questions as well, something like, why did you choose dentistry, what subjects did you do, and stuff like that." (DS7 C1 Year 3, Yr3 FG, 2015)

The literature suggests that an interactive format of workshops like the one described above, which incorporates informal discussions, encourages learning for both the pupils and the HE student ambassadors and promotes the development of pupils' HE learner identities (Gale *et al.* 2010; Gartland 2015). Little consideration is given in the literature as to how this learning occurs and how these identities are formed in pupils. Through this lens, by focusing on the work of social interaction between the dental students and the pupils, we have explored how pupils claimed identities in the Figured Worlds of A2D and schools (see page 171). Novices to Figured Worlds act, at first, in accordance with the cultural practices of other, expert individuals in that world. In this instance of the modified school visit, the pupils looked to the actions and practices of the schoolteachers, who accompanied the pupils for these activities, and were 'experts'

(role models) in interactions of question-and-answer sessions. So, the questions posed by the teachers, to "encourage conversation", were then appropriated by the pupils as artefacts to help them enact agency, devise their own actions and rules and, by participating in the social interaction of this session, further develop their identities in the intersecting Figured Worlds of A2D and HE.

A Figured Worlds lens has also enabled us to see the mechanism by which dental students developed their identities as expert ambassadors in A2D (see page 169), something that is under-researched in the literature. This identity, of expert student ambassador, became more significant to the dental students during the interaction described above, as they recognised the serious information and insights into HE behind the "fun" Bingo activity.

Notwithstanding the findings above related to development of pupil identity in WP activities, not all pupils ascribed significance to this social interaction. The learning and identity development attributed to WP activities cannot be uniformly applied to all pupils that might participate in WP initiatives, as the next quote demonstrates:

> "Yeah, cos when they came to our school, we learnt CPR, which we learnt just the week before, in our PSHE lessons, so we were like, yeah we know that. And then we did a timetable thing, but it doesn't really help to [understand]… they were like, yes, put the slots in, […] what you would do in this time, what you would do in that time, but like, that, you can learn that afterwards. You know you want to learn something different, like a different skill first, before." (SP3 S3 C1, Year 11, Yr3 Int, 2015)

This pupil's experience of the school visit was in contrast to her experience with the workshop sessions at the campus visit (page 173), where she enjoyed the workshop session and appropriated the exercise as a notional artefact to help her understand the Figured World of dentistry. Instead, at this school visit, she did not regard this social interaction as helpful to her learning in the Figured World of A2D. The practical CPR activity was not new to her and so did not draw her further into the Figured World of A2D. She perceived the 'Bingo' exercise as focusing on matters easily learnt later and less relevant and interesting than learning another practical skill. Therefore, this social

interaction did not hold salience for her. This example is contrary to the literature, which suggests that the provision of IAG through social interaction with HEI students as ambassadors inevitably leads to the creation of learner identities in young individuals. This approach in the literature implies a homogeneity of salience with HE amongst young individuals, which can be achieved by fulfilling whatever deficit exists. Data in previous sections highlighted examples of different ways that salience develops in different individuals (page 175) and of different levels of salience in different contexts in the same individual (page 176). The example above expands our theoretical understanding of possible mechanisms by which salience may or may not develop in WP initiatives. Activities need to appeal to pupils as giving them something which they did not have before (*e.g.*, valuable information, novel hands-on experiences, access to knowledgeable people – especially in a context when they can ask questions that matter to them and get informed answers). Further, the quote above speaks to the importance of the HEI maintaining close liaison (partnership working) with the schools to ensure that the activities are relevant and interesting (therefore, salient) to pupils in those schools. What is salient to some pupils may not be salient to other pupils and so the same activities produce different outcomes. The design of WP initiatives, and expectations about their impact, need to anticipate and be more mindful of individual and group-level (*e.g.*, school-level) differences in salience as the norm (see subsection 9.4.2, page 221).

8.3.1.3. School visits 'became' peer mentoring

In addition to their function as workshop sessions, school visits in their modified format would function as sites for peer mentoring:

> "[…] with the [dental] students going into the schools and mentoring as well, it actually provides the students [pupils] at schools who take part, with really good opportunities, really good insights into what medicine and dentistry involve." (PCT2, Yr2 Int, 2014)

The WP officer had interchangeably labelled a component of the redesigned school visits (the activity of providing guidance on medicine and dentistry) as "mentoring" (which is distinct from the definition of mentoring in the literature-the relationship between two

individuals (subsection 2.7.3.3, page 44). She did not elaborate on how the mentoring at schools would be carried out. However, she believed that the evolving school visits would incorporate peer mentoring and would fulfil the stated *aims and objectives* of peer mentoring in A2D in the form of guidance on HE choices ("really good insights into what medicine and dentistry involve"). Indeed, the question-and answer session served this aim, at least loosely. *Evaluation* of peer mentoring would continue as planned in the initial conception (page 96). However, it was not clear whether (or how) the other characteristics of peer mentoring (page 45) would be realised: the *focus* of academic and pastoral support through development of long-term relationships; *selection and matching* of mentors and mentees; *training and support* for mentors; and a *defined structure* of the mentoring process. In particular, the dental students struggled to see how school visits could be labelled as peer mentoring and how the WP initiative's focus, which rested on the development of the long-term relationships between mentors and mentees, could be achieved with the redesigned school visits and peer mentoring:

> Dental student (DS5): "Yeah, cos this seemed quite unrelated to what [was previously planned], it's not like a small group of us, like with a small group of [pupils] to mentor. It's more kind of a general, more kind of a… just any [dental] student will go to any school, and just kind of be there to give them information, rather than… (trails off).
>
> Dental student (DS2): Yeah, I felt it would be more useful if it was a continuation (everyone murmurs agreement). I felt like even when I was at the school for that session, I felt like I wanted to sit there for another hour and be like, what questions have you got? I wanted it to be more of a [relationship building] to actually help them, if they wanted advice for the future, to help them, rather than a one-time advice, which is what it feels like."
>
> (DS5 and DS2, C1 Year 3, Yr3 FG, 2015)

The dental students recognised that 'peer mentoring' in its redesigned format would be constrained by the brief, "one-time advice" that they, the dental students, could provide and by its incongruence with the initial conception of the development of long-term

relationships. The targeted pupils also valued the anticipated long-term relationship development that was initially envisaged by the Project Core Team. A pupil described the difficulties she faced with the redesigned format:

> "Pupil (SP23): I would have liked it if they were the same people, so that you could have like a contact, like someone that you were used to, and someone that you could speak to, and then know, like, cos obviously everyone has different experiences so if you stick to the same person you'll see how they've progressed from Year 1 to Year 5. But cos you have different people, they might have found their first year different to the other person.
>
> Researcher: Sure, yeah, absolutely right, and was it difficult to engage with them?
>
> Pupil (SP23): Yeah, cos you need to get to know them again, and just took a bit longer."
>
> (SP23 S3 C1, Year 11, Yr3 Int, 2015)

The pupil's and the dental students' concerns are mirrored in the literature. Building relationships with people takes time and requires recurring meetings, although the literature is not clear on the duration, number or frequency of meetings required to build that relationship (Gershenfeld 2014). This pupil had previously met different groups of dental students at the first campus visit and had interacted with them, learning about undergraduate dentistry and about the dental students' experiences of HE, which she recalled "was fun". As a result of that 'ice-breaker' meeting with the dental students, she had developed salience with this Figured World, was keen to pursue the undergraduate course, thereby developed an identity as a future HE student. As an active participant in the Figured World of A2D, she was looking to build on her knowledge of dentistry as an HE option and to develop a relationship with the dental students. When I asked her if she obtained the information she was seeking, she assured me that "[it] was alright. We just spoke about it." With further probing about what information she obtained, she responded:

> "We spoke to them, after we did [the workshop session], we spoke to them about how they got into dentistry, why they chose it, and how they liked it." (SP23 S3 C1, Year 11, Yr3 Int, 2015)

This pupil recognised that the redesigned format of the school visit would not enable the development of a relationship with the dental students. However, she exercised her agency and appropriated the notional artefact of information about the pathways to undergraduate dentistry. Constrained by the format of the school visit, but drawing on her identity in this Figured World, this pupil had successfully improvised her interaction with a new group of dental students at the school visit. So, the improvisation by the WP officer, PCT2, in redesigning the school visits and peer mentoring created circumstances for this pupil in the Figured World of A2D, which compelled her to improvise if she wanted to ensure personal success in the Figured World of HE admissions.

This pupil's successful improvisation does not draw attention away from the fact that the modification to school visits and peer mentoring set aside the original ambition of nurturing the long-term mentor-mentee relationship in A2D. Nevertheless, the actions of participants shape the Figured Worlds they inhabit, which are always dynamic and always evolving. This modification of the activities in A2D was an improvisation which, for a short period of time, came to be embedded in the practices of this Figured World. This modification, as we shall see in section 8.3.3, became a site for further improvisations to the activities in A2D.

By the end of Year 3 of A2D, a new WP officer (participant PCT3) was recruited to the Figured World of A2D to replace participant PCT2. A2D underwent further evolution in some activities, demonstrated pictorially in Figure 14, and outlined on page 188. School visits remained largely unchanged from the previous evolution (page 187), in function (provision of IAG) and in format (workshop-type activity and interaction sessions), while introductory talks to Year 8 pupils continued to be held on the HEI campus. This format of school visits and introductory talks continues at the time of thesis submission.

8.3.2. Campus visits continued as workshop activities but evolved for some groups of participants

Annual campus visits continued to deliver workshop-type activity sessions with dental (and subsequently medical) students, so as to fulfil the aim of enabling pupils to imagine themselves in the HEI environment and to interact with the HE students. Pupils developed salience with the Figured World of HE through their interactions and through appropriation of artefacts during campus visits in the Figured World of A2D (page 175). As the WP initiative evolved, this salience and the developing identity in pupils enabled some pupils to gain expertise in the Figured World of A2D, which one pupil in particular reflected on how her evolving behaviour and actions were responsible for the different artefacts she appropriated on different campus visits:

> "I think in Year 9 because I was younger, all I was concerned about was […] how fun it would be and like what activities they did. But then when I got to Year 10 and 11, it was more the academic route, like, how much, what I need to know and what I need to do to get in, like what work experience and stuff. So, the information did change, but because of what I asked." (SP23 S3 C1, Year 11, Yr3 Int, 2015)

This pupil was responding to my question about how her experience with A2D had changed during the three years that she had participated in this WP initiative (during which time she was also maturing as a teenager in multiple Figured Worlds, such as school, home and her social activities). She eloquently described her evolving identity in the Figured World of A2D: from being interested at first in "how fun" the activities would be, to concerns about the more serious "work experience and stuff"; which, in turn, reflected the evolving artefacts that she appropriated (the fun aspects of HE participation to the serious admission requirements) and which, she was able to reflect, was as a result of her agency ("because of what I asked"). This pupil had been offered a subject position as a mentee participant in the Figured World of A2D. She accepted the subject positioning, negotiated and appropriated the artefacts as they were relevant to her at different points in time. She enacted her agency and developed salience to the point of expertise in this Figured World. In Figured Worlds, expertise is marked by the

ability to devise one's own actions. This pupil was no longer dependent solely on what was offered to her by other participants (such as the dental student mentors). Her expertise in the Figured World of A2D meant that she devised her own ways to obtain the information and artefacts that she needed to develop expertise in the related Figured Worlds of HE admissions and HE.

8.3.2.1. Campus visits evolved for Year 11 pupils

In Year 3 of A2D, although the monitoring survey received positive participant perceptions to the campus visit, the Project Core Team noted lower than expected numbers of the first cohort of Year 11 pupils at the campus visit (normally held in the second half of the summer term) (Project Core Team Evaluation Document 2015, reference withheld to preserve anonymity). The assistant head teacher at a school had previously explained to me the reason for the anticipated reduced participation by that cohort:

> "[…]our head teacher is saying, Year 11s are not allowed out on trips, they need to be in school all the time [to prepare for examinations], so if there are trips for Year 11s, if there's, you know, an event where Year 11 are required to attend, I may have a challenge in persuading, in allowing the girls to go." (SS5 S4, Yr3 Int, 2014)

The assistant head teacher was referring to high-stakes examinations that the Year 11 pupils would sit at the end of the academic year, the preparation for which would necessitate reduced participation by pupils in activities outside school. Upon reading the evaluation document referred to above, it was apparent that the Project Core Team had not predicted the constraints that schools would face with bringing Year 11 pupils to campus visits. In response to the low attendance of the first cohort of Year 11 pupils at the campus visit and recognising the reason for this low attendance, campus visits for subsequent cohorts of Year 11 pupils were supplemented by the annual school visit and further supplemented by an additional campus visit when the pupils were Year 12. Whilst this study could not explore the perceptions of school staff to this improvisation, the Project Core Team Evaluation Document from subsequent years (2016, 2017) suggested that retention (see footnote 8, page 139) of the first cohort of pupils in A2D

remained steady following the modification, until they graduated from A2D. These findings need to be interpreted with caution as it is difficult to attribute causality (and this thesis never set out to determine causality). However, it is possible to examine the actions of the Project Core Team through the Figured Worlds lens.

In Figured Worlds, the balance of power is distributed amongst groups of participants. At first, power to organise the WP initiative might be considered to rest with the Project Core Team. When stakeholders (schools) shared their views and acted according to their constraints (examination preparation) while interacting with the activities in A2D, the power to sustain the activities for some groups of pupils now rested with the schools and improvisation by the Project Core Team could develop. In this WP arena where developing and working in partnerships was important, the Project Core Team supported and worked with the needs of the different stakeholders. The Project Core Team improvised the activities in response to the circumstances and participant needs, thus the landscape of A2D evolved. In this way, partnerships were maintained, and participant engagement and salience were encouraged.

8.3.2.2. Parents' events: a new activity

The WP initiative incorporated a further activity into its programme – a parents' event. This was designed in response to feedback from school staff ("are [the Project Core Team] gonna be speaking to parents?" (SS3 S2 Yr1 Int, 2013)) and was first incorporated in Year 4 of A2D. The event comprised of an initial introductory talk, similar to those at school visits (page 166), followed by a brief question-and-answer session (parent questions often centred around admission requirements and finances) and workshop-type activities conducted by the dental students. The importance of this event as a notional artefact for parents has been discussed on page 122. The parents described in this section were novices to the Figured World of A2D (and perhaps to the Figured World of undergraduate dentistry), where notional artefacts, such as discussions arising from the parents' event, would serve as mediators of their activity (Holland *et al.* 1998). The motivation, for the Project Core Team, for organising this event was to enable parents to support their children make successful applications to HE courses such as dentistry or medicine. In other words, by experiencing the HE environment, the Project Core Team hoped that the parents would develop salience with the Figured Worlds of A2D and HE

and experience gradual shifts in their identities as practical supporters of their teenage children as they progressed through HE. Of course, another motivation for the Project Core Team was to maximise engagement by the pupils and schools in A2D through the support of the parents:

> "[…] and certainly, we want to try and minimise them putting off their child for something that they perhaps haven't understood" (PCT3, Yr3 Int, 2015)

Once again, an artefact that served one function for parents (mediating salience with the Figured Worlds of A2D: so that they could 'understand' the world), served a different function for the Project Core Team: by engaging the parents in the WP initiative, the Project Core Team hoped to enhance engagement by pupils and by schools, so that further perpetuation of the Figured World of A2D would be sustained. It was not within the remit of this thesis to explore the perceptions of the parents in A2D to these events and may be a site for future research studies.

8.3.3. Peer mentoring evolved from face-to-face to electronic format

Peer mentoring underwent significant evolution during Year 4 of A2D. The WP officer (participant PCT3) responded to dwindling participation by dental students in A2D (because of their academic and clinical commitments) by designing and implementing e-mentoring, to "fit with [the dental students'] schedule" (PCT3, Yr3 Int, 2015). He was confident that the newly designed format, of peer mentoring for Year 12 and 13 pupils through a bespoke secure online platform, would be successful in the aim of guiding the pupils in their HE choices (particularly medicine or dentistry):

> "I think that it's certainly something that will hopefully really support those students that have actually got to Year 12 and go, you know what, I definitely want to do medicine or I definitely want to do dentistry" (PCT3, Yr3 Int, 2015)

Training for both, mentors and mentees, would be provided by the WP officer, "where I will go through expectations, what the programme is about" (PCT3, Yr3 Int, 2015).

Dental (and medical) student mentors would be recruited through an email inviting interest and application to become a mentor.

The newly designed online mentoring thus incorporated the characteristics of peer mentoring described in the literature (page 45): there were defined *aims and objectives* (supporting pupils that wanted to pursue medicine or dentistry); the *focus* was academic support and guidance on progression to HE (medicine or dentistry); *selection* of mentors was through emails and application forms; mentees would be selected from A2D participants once they had reached Year 12 (and therefore, presumably, demonstrated commitment to pursue medicine or dentistry); *training* would be provided and there would be guidance on the *structure* of the mentoring ("what the programme is about"). The *evaluation* of the mentoring, along with that of A2D, would be conducted by HEI's central WP office (see page 96).

When I asked the WP officer about the motivation for introducing these changes: mentoring in the later stages of a pupil's participation in A2D, incorporation of e-mentoring, mentor selection through an application process; he explained that whilst face-to-face mentoring had been the initial aim of A2D, the online aspect of mentoring would enable alignment with the busy schedules of the mentors and mentees. He further explained that he had drawn on his previous experience of delivering online peer mentoring in a WP role at another HEI. In his previous role, his negative experience with the younger, Year 9 pupils (poor pupil engagement coupled with inadequate school support for the pupils) and the more positive experience with the older pupils (greater commitment towards HE progression) led him to consider the effects of age, individual characteristics and the focus of peer mentoring when redesigning peer mentoring for A2D. He contrasted A2D with the other WP initiative in terms of the characteristics of the initiatives and the characteristics of the mentored pupils:

> So yeah, I think now, […] [A2D] has this focus, medicine and dentistry, and the nature also of aspiring dentistry and medicine students, they've got to be good students, they've got to be switched on, because actually that's the expectation of them, when they get into university, so I kind of see it working a lot better in this instance than [his previous WP initiative]." (PCT3, Yr3 Int, 2015)

Holland and colleagues (1998) explain that individuals' history-in-person (*e.g.*, see pages 123, 142, 157, 169) – their experiences and identities in other Figured Worlds – influence their behaviour and their responses and ultimately shape their identity in any Figured World. This WP officer's experience in the Figured World of another WP initiative, his history-in-person, led him to embody certain principles: in his view, to succeed, peer mentoring required a defined focus (progression to a particular HE course like dentistry, rather than general aspiration-raising) and required the mentees to have certain characteristics ("switched on", "aspiring"). These principles then shaped his identity in the Figured World of WP initiatives, including A2D, which eventually drove his improvisation of peer mentoring.

In the literature, successful peer mentoring is predicated upon particular characteristics of the mentoring itself (*e.g.*, clear focus or aims) and upon particular characteristics of mentees (*e.g.*, those that are highly motivated towards a particular goal (Foy and Keane 2017)). How might a Figured Worlds lens predict this successful outcome for peer mentoring? In preceding sections, we have explored examples of pupils developing salience through social interactions in the Figured World of A2D (*e.g.*, pages 175 and 201). We have also examined the example of the pupil who, through recurring social interactions during campus visits, had developed expertise, and therefore the ability to direct her actions and her sense of self in this Figured World. Similarly, other pupils in Year 12 had participated for four years in A2D, had shaped their identities so that they were 'experts' in the Figured World of A2D. They acted by their own rules (*e.g.*, aspire to medicine and dentistry); they embodied the cultural practices of this world (they were "good students" and presumably working towards realising their aspirations). They would therefore organise their own actions and their behaviour through their agency in the Figured World of A2D, including through peer mentoring, to ensure they appropriated the guidance and resources they required to progress into the Figured World of undergraduate dentistry (or medicine or other HE courses). So, the salience developed through pupils' recurring social interaction via peer mentoring in the Figured World of A2D, would seed further ambition and lead to expertise in the Figured World of HE admission and of undergraduate dentistry (or medicine). My study was unable to explore the perceptions of the dental students or the pupils to this improvised e-

mentoring, which would have enabled insights into the core mentoring and the consolidation stages of peer mentoring (see page 46) and is therefore acknowledged as a limitation of the study (subsection 9.7.3, page 231). However, the monitoring survey that captured participant comments towards e-mentoring (Project Core Team Evaluation Document 2017, reference withheld to preserve anonymity) highlighted mainly positive responses: the pupils valued being able to contact the dental students throughout the year, at times that suited them (the pupils), whilst the electronic component of the mentoring enabled them to ask questions that could be carefully thought out and expressed, without being intrusive upon the dental students' time or without having to physically travel to the mentor. At the time of thesis submission, e-mentoring continues as a key component of A2D. Further research in this area is recommended to fully explore participant perceptions towards peer mentoring and, in particular, to understand the effects of this on A2D's focus of fostering long-term relationships.

8.4. Summary

The examples and activities described in this chapter belie the rather simplistic notion that the provision of information, in the form of IAG, is naturally salient to all pupils and will naturally result in progression to HE as long as individuals are provided with the information. The notion implies a homogeneity in young people's potential educational trajectory, constrained only by the disadvantage that some individuals face; a homogeneity that is not evident amongst the participants in this study. The simplistic notion underplays both diversity and the key role of social interaction in the development of pupils' identities as HE participants.

In a Figured World, Holland and colleagues (1998) discuss, individuals are recruited either of their own will or through the actions of other individuals. Through the activities and the social interactions in a Figured World, individuals create and appropriate artefacts, enact agency and improvise, claim and offer subject positions and, ultimately, develop salience with that world. Eventually, through the recurring social interactions and by embodying the cultural practices and artefacts of the world, individuals can

organise their actions, their behaviour and their sense of self, thereby leading to expertise in that Figured World.

The dental students were recruited to the Figured World of A2D, as ambassadors and as mentors, through their particular history in the Figured World of dental education. The pupils were positioned by their schoolteachers as belonging to particular disadvantaged backgrounds and therefore recruited to the Figured World of A2D. Through the evolving activities of campus visits, school visits and peer mentoring, both groups of participants enacted agency in addressing their subject positions and authored identities that were shaped by the level of salience that they developed with the Figured World of A2D. The salience, in turn, was shaped by the social interaction between the dental students, the school pupils, the other participants in A2D and the Figured World itself. Some individuals (dental students and pupils) struggled to develop salience with A2D and therefore did not engage with this world. Others developed salience to the point of expertise with this Figured World which shaped their evolving identities in other Figured Worlds, such as that of HE admissions.

School visits in A2D were designed, first, as introductory talks to provide IAG and introduction to dentistry and later, as workshop-type activity sessions. In this evolving WP initiative, the Project Core Team recognised the importance of face-to-face meetings with school staff as well as pupils. They supported the needs and concerns of the schools and, working in partnership with the schools, modified the initiative to maintain relationships with schools and to engage the pupils: thereby striving towards the goals of A2D (see section 5.1, page 94). The school visits were sites for the dental students to develop their expertise as student ambassadors, by drawing on their evolving experiences in the Figured World of dentistry. The IAG available through the introductory talks and the workshop sessions of school visits were artefacts that school pupils interacted with in different ways and developed salience to greater or lesser degrees. Thus, they authored different types of identities in the Figured World of A2D. This authoring of identities in the Figured World of A2D also influenced their interactions in other existing and future Figured Worlds, such as the decisions that they made in school. Dental students appropriated their interactions and the workshop activities as

artefacts in the form of improved styles of communication required for the Figured World of clinical dentistry.

Campus visits were the main method by which school pupils could 'see' themselves in an HE environment. Figured Worlds enabled us to theorise this 'seeing', through an exploration of the mechanism by which pupils appropriated artefacts, developed salience and expertise in the Figured World of A2D and therefore enabled imaginings of themselves in the Figured World of HE. The future imagining, and therefore salience, of young individuals in the Figured World of HE was further strengthened by the actions of the Project Core Team to expand campus visits to their parents (through parents' events), opening up opportunities for development of salience for the parents.

Peer mentoring, for which the initial focus was on the development of long-term relationships between the dental students and school pupils, supported sustained interpersonal interaction and allowed us to see the mechanism by which it would be possible for salience to develop in the Figured World of a WP initiative. In a Figured World, when participants are allowed time to interact with other participants or with the Figured World itself, the construction and apprehension of artefacts allows for development of identity, for the development of salience and for evolution of the Figured World of a WP initiative. A Figured Worlds lens also allowed us to predict how pupils' aspirations for HE participation, shaped by salience through recurring social interactions in the Figured World of A2D, would be further developed through the focused interactions of e-mentoring, thereby mediating expertise in the Figured World of HE admission and of undergraduate dentistry (or medicine).

The mechanisms by which activities in A2D achieved the aims of providing IAG and enabling salience and therefore particular identities in its participants (dental students and school pupils) can be conceptualised through a model; the mechanisms are grouped as strategies into *Previous experience*, *Recognition of similarities/differences* and *Identification of cultural practices*. These strategies encompass the actions, the improvisations and the artefacts appropriated by the participants in A2D and are illustrated in Figure 15 below.

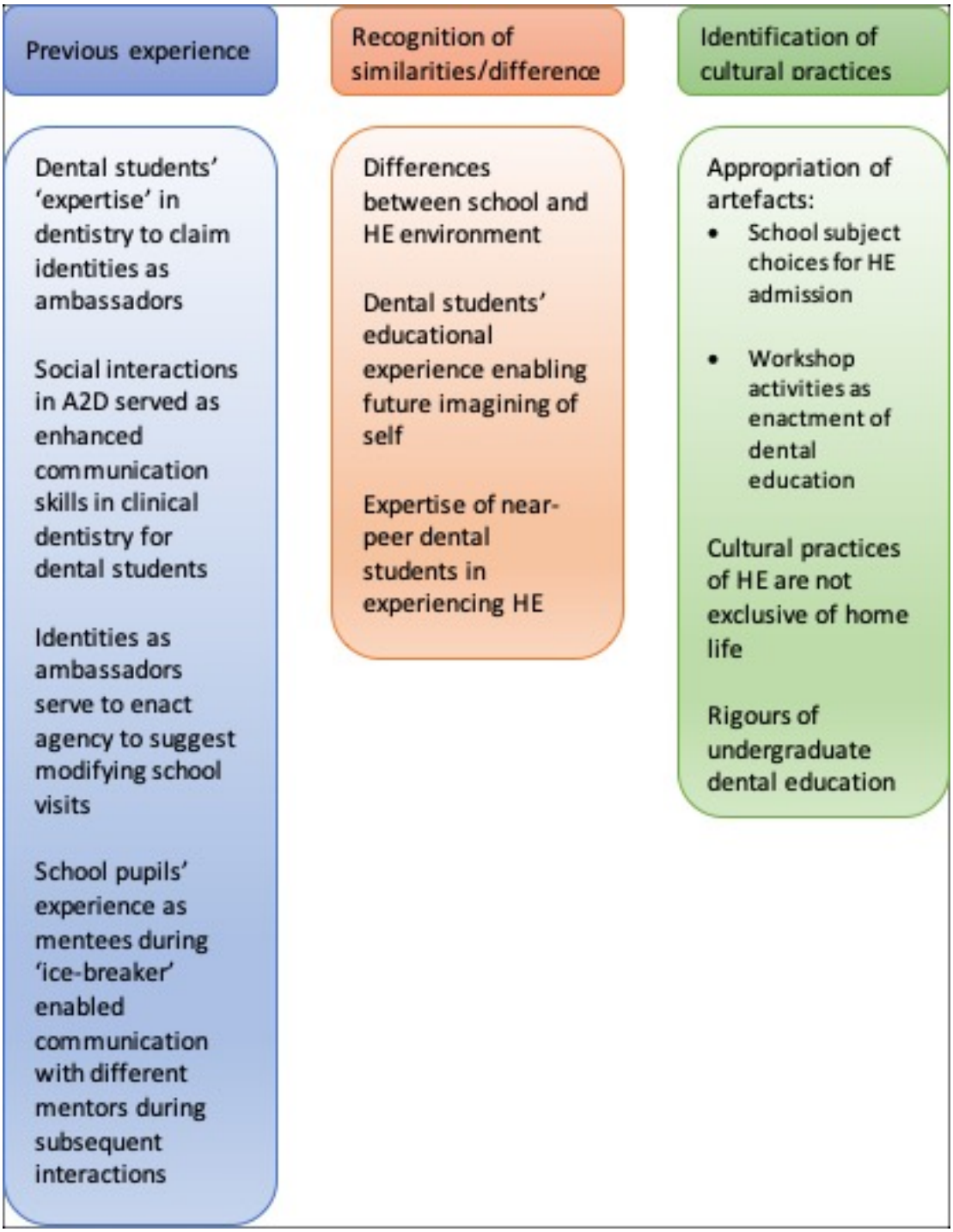

Figure 15: Conceptual model of strategies that enable identity formation in WP initiatives

The Figured World of A2D significantly changed the way it operated in response to the recognised constraints of key stakeholders. Improvisation enabled its members to collaborate more effectively and work toward shared goals and to build new social relationships. For example, the balance of power between participating schools and the HEI became more equal as the HEI strove to adapt to the schools' constraints, policies and pedagogical concerns in respect of campus visits. The findings of this chapter demonstrate the central tenets of Figured World theory, that actors shape their identities within Figured Worlds *and* their actions shape and evolve the Figured Worlds. This evolution and the development of salience were the key mechanisms by which the participants were able to enact the activities of A2D.

Chapter 9. Discussion, conclusions and recommendations

9.1. Introduction

The purpose of this research study was to develop an in-depth understanding of a particular WP initiative (A2D) in order to understand what strategies were employed by the WP initiative that would support successful pupil engagement and evolution of the initiative and to advance theoretical knowledge of the wider field of WP. In order to develop this understanding, a detailed exploration of participant perspectives was carried out in relation to targeting of pupils and in relation to the activities in A2D.

The chapter begins with an outline of the research questions that were addressed by the thesis (section 9.2). This is followed by a discussion of the Figured Worlds lens which underpinned the analysis of the findings (section 9.3). Chapters 6-8 have explored the themes arising from exploration of participant perspectives in relation to A2D and this chapter brings these themes together in the context of the wider literature and through the research questions (section 9.4). This then leads to a discussion of the specific contribution of the thesis to the literature (section 9.5). Reflections on the quality of the study follow in section 9.6. The chapter then notes the limitations and strengths of the research study (section 9.7). Based on the discussion of the findings in this chapter, recommendations are discussed next (section 9.8), both, for those researching WP and for those practising WP. The chapter closes with concluding remarks in section 9.9.

9.2. Research questions

The findings presented in Chapters 6-8 addressed the research question:

What insights can be gained from a detailed, in-depth understanding of the perspectives of different groups of A2D stakeholders? Particularly in relation to:

1. Targeting the recruitment of participants for WP initiatives

2. The interpretation, enactment and evolution of the activities by stakeholders within a WP initiative (focusing on A2D's three principal activities: school visits, campus visits and peer mentoring)

We will return to these questions in section 9.4. In order to address the questions and to develop the understanding required of such questions, this doctoral study was designed as a qualitative research study, located within the epistemology of weak constructionism (Snape and Spencer 2003). This stance allowed for a reflexive approach towards data collection, analysis and synthesis of findings by acknowledging the coexistence of durable aspects of the research context (*e.g.*, disadvantage) and the collectively constructed perspectives of the research participants and researcher (see section 3.2, page 62). A case study methodology (Stake 2008; Creswell 2013) was adopted to explore A2D through detailed and in-depth analysis (section 3.3, page 64) of multiple perspectives and data sources (sections 5.2, page 96 and 5.3, page 102). The case of A2D was analysed through the lens of Figured Worlds.

9.3. Figured Worlds

This study was underpinned by the theoretical perspective of Figured Worlds (Holland *et al.* 1998) which was described in section 3.4, page 66. Briefly, a Figured World is a socially and culturally enacted world, where the shared activities and interpretations of participants have the potential to bring about evolution or perpetuation of that world, through artefact appropriation, through improvisation and agency and through and leading to shifts in identity of participants. Whilst this theoretical lens is mainly used in education research (including research into healthcare professions' education) and is increasingly being used to research other disciplines such as healthcare or politics (see Chapter 4); it has not been employed to examine WP; therefore, in researching WP, this thesis has undertaken a novel approach.

Most qualitative studies of WP, when grounded in theory, are underpinned by theories of social capital (or other forms of capital) or habitus (see section 2.10, page 57 and (*e.g.*, Basit 2012; Alexander *et al.* 2019)), which are inherently deficit models. These predominantly explain low participation, and the resultant desires to increase and widen participation (section 2.3, page 21), in terms of deficiencies in the experiences,

knowledge and social connections of individuals, or disadvantage in their social contexts and relationships. Whilst they offer important insights and identify complex intertwined factors which WP initiatives can be designed to address; they say little about how WP initiatives actually work.

A2D can be viewed as a Figured World: a socially and culturally enacted world created as a result of the dominant cultural discourses of WP, with particular groups of participants (figures) – the Project Core Team at the HEI, the school staff, the dental students and the school pupils – whose shared actions and interpretations enabled the evolution and perpetuation of the WP initiative. Adopting the novel lens of Figured Worlds offered the potential to expand current understandings of WP initiatives, through a detailed examination of the case of A2D in particular. Consistent with weak constructionism's acknowledgment of the coexistence of durable aspects of the research context and the collectively constructed perspectives of the research participants and researcher, the Figured World lens recorded and acknowledged the commonly held notions of deficit in disadvantaged individuals (*e.g.,* lack of parental HE experience, lack of individual agency or aspiration) and of the institutional constraints on the activities and strategies within A2D. The Figured Worlds perspective expanded the research gaze, to some extent weakening the focus on deficit, by focusing on the interactions of individuals with other individuals and with the activities of A2D through their agency, improvisation and artefact appropriation (explained in section 3.4, page 66). It became possible to generate more holistic knowledge about the WP initiative and a theoretical understanding of not only individual perspectives but the multiplicity of the components that shaped this initiative. It became possible to see the mechanisms by which aspects of A2D, such as targeting, were interpreted by different stakeholders and the mechanisms by which the multiplicity of interpretations and enactment of activities in A2D led to its evolution. The strength of this sociocultural theory lies in its emphasis on the possibility for change through participation in the activities of Figured Worlds.

Nevertheless, this thesis recognises that the Figured Worlds perspective is complex and has to be conceptualised by a researcher in ways that are relevant to a particular study context. As a result, the growing body of research using the Figured Worlds lens uses

the approach inconsistently and, in some cases, draws upon a limited range of its many component concepts (see sections 3.4, page 66 and 4.5.2, page 86). I acknowledge that my perspectives on WP and my understanding of Figured Worlds have coloured the conceptualisation of this study. My aims in the use of the Figured Worlds lens have been to apply the breadth of the Figured Worlds concepts, including identity, agency, improvisation, artefacts, interpersonal interaction (and salience) and multiplicity of Figured Worlds. In doing so, the thesis was able to illustrate how the figures (a variety of stakeholders) grappled with uncertainty and negotiated the structures in which they were operating. Thus, these concepts revealed the influence of personal histories, values, practices and social positions and showed how these figures navigated forwards from these positions and through the practices of a world.

WP initiatives are largely about developing individuals (although it is important to focus also on developing the social contexts supporting or constraining individuals). The objective is to help individuals with little insight into the world of higher education to make informed choices and gain confidence in respect of the possibility of entering that world. This thesis focused on evolution in A2D because there are very few longitudinal case studies to support understanding of the evolution of WP initiatives. The Figured Worlds perspective is well-suited to this research focus because of its emphasis on the development of those worlds through the actions of those who enter (or leave) the worlds, on the ways in which individuals author their identities within a cultural world and on the interactions between the multiple cultural worlds that individuals inhabit.

9.4. What insights could be gained from a detailed, in-depth understanding of the perspectives of different groups of stakeholders?

9.4.1. On targeting

Targeting refers to the selection of pupils for participation in WP initiatives such as A2D, by the application of certain criteria (which are often a mixture of individuals' academic attributes and their socioeconomic disadvantage). Previous research and published

arguments focus on targeting the 'right' pupils and include the drivers and criteria for targeting (section 2.9.1, page 52). The literature also discusses suboptimal targeting methodologies which may not align to the targeting criteria resulting in: the use of proxy targeting criteria such as parental HE experience, parental income, school type or geographical indicators (Harrison and McCaig 2015), the effects of personal judgement by gatekeeper school staff in targeting individual pupils (Waller *et al.* 2015) and the negative effects of targeting on individual pupils (whether targeted or not) (Rainford 2016). The issues are intricately linked to the drivers for targeting, *viz.*, making best use of limited resources, directing WP activities towards those that are believed to benefit most from them and, equally importantly, policy requirements (such as fulfilling Access Agreements). However, there has been very little focus on how targeting plays out in the real world. Further, the literature does not explain what factors influence and are influenced by these targeting strategies in individual WP initiatives, or indeed, how different individuals make sense of and adapt targeting strategies in response to the issues they may face in WP initiatives. The remainder of this section discusses the contribution of this thesis to expanding understanding of targeting.

Targeting in A2D has been explored in Chapter 7. This examined how targeting was interpreted by HEI staff, by school staff and by the pupils themselves. The findings from that chapter directed us to the drivers of targeting for the different groups of stakeholders in A2D (section 7.5, page 159), which were summarised as *Principles*, *Pragmatics* and *Prediction*. These findings, in turn, now draw our attention to the drivers of targeting described in the literature. In the literature, the *Principles* that drive targeting for WP staff in HEIs (particularly selective HEIs such as the one in this study) are diversity of student intake and recognition of schools' expertise, autonomy and constraints. In balancing the principle of diversity in demanding courses (such as dentistry or medicine) against the wider educational principles of maintaining the institutions' 'excellent' academic status and protecting the institutions' students against the destructive experience of failure, there are tensions (see page 23) which then guide targeting of highly achieving disadvantaged individuals. However, partly in order to balance HEIs' conflicting principles of WP versus 'excellence' in education, WP staff in HEIs rely on school staff to make the decision of who should be targeted for WP

initiatives. This reliance on gatekeeper school staff is closely related to the second principle that drives targeting: that of respectful recognition of schools' expertise, autonomy and constraints, which ensures engagement of schools in WP initiatives by not implementing too rigorous targeting guidelines which might dissuade some schools from participating in WP initiatives (Harrison and Waller 2017). Engagement of schools is ensured by targeting schools that are easily accessible to HEIs, either because of the geographical location or because of previously established relationships through other (WP-related) activities.

These *Principles* are similar to those of the Project Core Team in A2D, that is, the HEI engaged with schools that were relatively easy to access and recognised schools' autonomy and expertise by taking an initially non-directive stance towards targeting of pupils. However, the HEI later recognised schools' constraints and need for guidance. Therefore, the HEI adapted its stance by providing targeting guidelines and creating SLAs in response to what was perceived as inappropriate targeting, difficulties engaging some schools and school staff concerns. However, the similarities with the literature are restricted to this group of stakeholders and even then, there are no studies that explore how WP practitioners at HEIs interpret and react to the process of targeting within WP initiatives.

Most research on targeting provides a monolithic view, from the perspective of the policymakers and from the perspective of WP practitioners at HEIs (*e.g.*, Rainford 2016). There are few studies that explore the challenges faced by schools when interacting with HEIs whether for WP or in other contexts such as research (Sasia 2008; Handscomb 2014). Furthermore, no studies were located in the literature that have explored the perspectives of the school staff who are 'doing' the targeting nor the steps they take to carry out targeting. Some studies show that WP practitioners in HEIs note variable approaches to targeting by school staff (*e.g.*, Harrison and Waller 2017). The stance is pejorative, such as suggesting that school staff may not always be reliable in correctly identifying disadvantaged individuals or that targeting is sometimes conducted to fulfil individual schools' agenda such as promoting the school or widening opportunities to smaller groups of academically able individuals. In contrast, the findings in Chapter 7 revealed a complex fusion of principles, pragmatics and prediction, shaping the

targeting of pupils and evolving the Figured World of the A2D WP initiative. The school staff in A2D *were* constrained by what some perceived as inadequate guidance and limited resources; but were nevertheless *driven* by the desire to provide opportunities for increasing access to HE for as many pupils as possible. They therefore enacted targeting through varying approaches, which highlighted the *Principles* that drove their actions: the need to use WP criteria for targeting, ensuring diversity in targeted groups or enhancing opportunities for reluctant pupils or pupils who were perceived to have potential beyond that signalled by their current academic attainment.

There is very little literature on the *Pragmatics* and *Predictions* that drive the enactment of targeting. Pragmatism exercised by HEI WP practitioners in engaging schools that are easily accessible and in their permissive targeting guidelines to sustain this engagement is discussed in a small number of studies and reports (*e.g.*, Harrison *et al.* 2015; Rainford 2016). Since these studies only focus on WP practitioners in HEIs, there is no exploration of the perceptions of school staff or the approaches they take in targeting pupils for participation in WP initiatives. Section 7.3 discussed the ways in which school staff targeted pupils; to summarise, they pragmatically relied on their own and colleagues' judgement about pupils' abilities (arguably so that pupils were not being set up to 'fail') and they devised methods for pupils to demonstrate enthusiasm. In doing so, they were making predictions about which pupils were most likely to benefit and also most likely to remain engaged in the initiative.

Were there any positive effects of the (sometimes tentative) targeting strategies on individuals in A2D? Although not explicitly stated as the aim of A2D, for the HEI, the initiative was instrumental in contributing to its Access Agreement. From the first cohort of 28 pupils participating in A2D, four remained on the initiative, of which two successfully applied to dentistry, while the other two were successful in securing a place to study medicine. In terms of outcomes, this is similar to those reported in the literature (*e.g.*, Smith *et al.* 2013). The initiative could be considered a success for these four pupils. To that extent, the initiative could be considered a success for their secondary schools, since the schools were instrumental in targeting these individuals to participate in A2D. Although it is not possible to attribute causality to A2D (and the thesis was never designed to study cause-and-effect), the initiative could also be considered a success for

the Project Core Team, who could claim at least some role in the academic progression of these four pupils. Studies of WP initiatives cite positive changes in attitudes of pupils following (and therefore attributed to) participation in WP initiatives (Alexander *et al.* 2019; Kilpatrick *et al.* 2019). It might be hoped that the initiative had a positive impact on some of the other young participants in A2D, who might have progressed to other courses and careers aided partly through the information and artefacts gained from A2D (this study was unable to track destinations of pupils who did not apply to dentistry or medicine). There might also be benefits for individuals not targeted for A2D. For example, Jackson and Price (2019) argue that, in the context of WP in postgraduate education, there are hidden benefits of mentoring on non-mentored peers of mentored individuals. In the case of A2D, whilst it was not possible to study the perceptions of young people not targeted, two school staff members, from schools S2 and S1 (subsection 8.2.2.1, page 172) expressed their vision for benefits of A2D to other pupils in their schools.

What about the negative effects? Targeting of schools is addressed by policymakers in the form of guidelines (*e.g.*, Dent *et al.* 2013), which include proxy indicators of disadvantage such as numbers of pupils on free school meals (FSMs) or the geographical area of the population served by the school. However, there is disagreement and ambiguity in relation to what guidelines are most appropriate (Moore *et al.* 2013; McCaig 2016). This leads to varying interpretation and enactment of targeting guidelines by HEIs and schools, and there are concerns about the HEIs targeting easy-to-access schools based on their geography (Harrison *et al.* 2015) or based on previously established relationships (Rainford 2016) and the resultant concerns about excluding cohorts of pupils (from excluded schools) that might otherwise benefit from WP (Thomas 2001). For A2D, initially, schools were targeted based on established relationships with the HEI, so as to ensure the launch and subsequent perpetuation of A2D. Some schools could not sustain participation in A2D and withdrew participation after initially engaging with the initiative. This naturally led to pupils from those schools leaving the A2D programme without choice (agency) in the matter. Reasons cited for schools' withdrawal included lack of staffing resources for coordination of activities or for accompanying pupils out of schools for the HEI campus visits (see section 5.1, page

94) or other competing commitments such as examinations. The withdrawal of schools (and indeed schools' decisions not to join A2D when invited) could not be explored further in this study and could be foci of future research.

The unique contribution of this thesis to the literature is not only in expanding our understanding of what mechanisms school staff employ to carry out targeting, but a detailed exploration of the drivers that enable these mechanisms, including policy constraints; institutional values; personal history, values, judgement and individual agency. The Figured Worlds analysis within this in-depth case study created a richly textured understanding of the multiple influences on targeting in this initiative, most of which would be present in a wide range of other WP initiative contexts. It resulted in a map of targeting processes across four school contexts (Figure 10, page 154) which begins to generate a nuanced yet potentially transferrable conceptual model, which can be tested in other contexts.

By examining the perspectives of different stakeholder groups, analysing qualitative data that included participant narratives, field note observations and documentary artefacts generated by the WP initiative, this thesis was able to provide a fuller and multidimensional picture with regards to targeting, one that could incorporate the sometimes contrasting perspectives of participants. The Figured Worlds lens expanded this understanding of targeting by showing us the factors that shaped and that were shaped by individuals' actions, responding to the changing circumstances of A2D. Rather than the hegemonic notion whereby HEIs' perceptions paint schools' actions in response to targeting, this theoretical lens illuminated the actions of the school staff, which demonstrated some surprising and creative, yet powerful improvisations. It directed attention towards the Principles, Pragmatics and Predictions employed by the school staff (and indeed other stakeholder groups) in carrying out their improvisations. By focusing on the actions of the different stakeholder groups, attention was directed towards the sometimes-conflicting principles driving the actions of individuals and therefore shaping targeting in this WP initiative.

In keeping with the Marxist philosophy of liberation from cultural determinism in Figured Worlds (see subsection 3.4.9.1, page 75), the findings of this thesis open up possibilities for understanding mechanisms in targeting. For example, policymakers

suggest the creation of a shared agenda between schools and HEIs in overcoming some of the concerns raised about targeting across the wide range of WP initiatives (Dent *et al.* 2014). In the Figured World of A2D, it was possible to see improvisations as steps towards creating that shared agenda. For example, the creation of the SLA (an artefact) by the Project Core Team was a pragmatic improvisation rooted in the principle of enhancing engagement with schools. Taking this improvisation as a site for future evolution, in designing future WP initiatives, the creation of an SLA might be a shared venture between the HEI and schools, as a step towards defining the shared principle for Widening Participation, which could sit in the so-called "third space" (Gutiérrez *et al.* 1999, p.286), a conceptual space where the apparently conflicting principles between HEIs and schools are a source of mutual flux and which facilitate generation of new knowledge, eventually leading to the development of this shared agenda.

9.4.2. On the interpretation, enactment and evolution of activities in A2D

WP initiatives include a variety of components such as school visits (by HEI staff and/or students), campus visits (in the form of workshops, summer schools, masterclasses or taster days) and peer mentoring, which are often delivered as a combined programme. The A2D initiative included the combination of school visits, campus visits in the form of workshops and peer mentoring with the specific aim of nurturing long-term relationships between dental (and medical) students and school pupils. This is interesting in relation to the literature which suggests that, irrespective of the type of activity delivered, a combination of activities is important for progression in HE (Moore *et al.* 2013) and that activities that are either long-term or intensive appear to be most successful (see subsection 2.7.3, page 40). but there is very little about the mechanism by which these activities deliver the aims of WP initiatives.

In Chapter 8, the interpretation and enactment of the evolving activities of campus visits, school visits and peer mentoring in A2D were explored through the perspectives of the dental students, school pupils, school staff and Project Core Team. The findings led to an understanding of the ways that the dental students and school pupils interacted with one another, with other participants in A2D and with A2D itself. To put

the implications of these findings in context, the next paragraph summarises the gaps in current understanding of activities in WP initiatives (discussed previously in subsection 2.7.3, page 40).

Campus visits and school visits are helpful in the overall WP strategy for providing IAG. School visits form an integral, albeit small, part of WP initiatives and are valued both for their utility in establishing relationships between HEIs and schools and for the benefits of the direct interactions between pupils and HEI staff and students. Campus visits are seen as superior to school visits, because they allow pupils to 'see' themselves as potential HE students and they serve to demystify HE for the most disadvantaged individuals (Bowes 2013). The ability to 'see' oneself in an HEI is a well-recognised benefit of campus visits (see section 2.7.3.2, page 43). Yet, this 'seeing' is under-theorised in the literature. Any theorisation focuses on the forms of capital that a campus visit provides to disadvantaged individual.

The literature suggests that the social interaction between school pupils and HE students during WP activities like school visits (*e.g.*, Gale *et al.* 2010), campus visits (Fleming and Grace 2015) and peer mentoring (Wilson and Grigorian 2019) is important for developing HE participant identities in school pupils; peer mentoring in WP further enables pupil aspirations by nurturing relationships between HE student mentors and pupil mentees. The mechanism of this identity development that is often cited in the literature is that of role-modelling by student ambassadors and by peer mentors (*e.g.*, Sanders *et al.* 2018), which enables pupils to enact future HE participant identities (Gartland 2015). However, the extant literature has not considered the other intersecting, complex factors that may influence this identity formation and that were evident in the findings of this thesis. Thomas (2001) argues against this the deterministic attitude towards the effects of WP initiatives, that is to say, participation in WP initiatives will naturally lead to uniformly successful outcomes (whatever those may be). The findings of this thesis support Thomas' contention that participation in WP activities leads to different experiences for different individuals.

School pupils were offered the opportunity to participate in A2D by their teachers, who viewed the WP initiative as a means to overcome perceived deficits. However, the pupils were not passive recipients of these opportunities. They enacted their agency and

interacted with the WP initiative to author their identities (*e.g.*, as mentees). They employed strategies which have been classified as *Previous experience*, *Recognition of similarities/differences* and *Identification of cultural practices* (see Figure 15, page 210) during their interactions with other significant individuals in A2D. During campus visits, school pupils recognised similarities (*e.g.*, dental students' backgrounds or educational trajectories) and differences (between the school and HE environment). By drawing on one or more of these strategies and by being in the HE environment, pupils expressed that they were able to imagine (or 'see') themselves as HE participants (subsection 8.2.2.1, page 172). During the activities of A2D, they also recognised the cultural practices of HE (such as discourses about work experience or admission criteria or subject choices). These strategies, and the artefacts they generated, enabled pupils to form identifications with the WP initiative.

From a Figured Worlds perspective, this identification is referred to as salience and individuals can develop more or less or even no salience with the world. The pupils in A2D developed varying levels of salience with the WP initiative (subsection 8.2.2.1, page 172). Some pupils developed greater salience with A2D and developed the expertise to interact independently with the cultural practices of A2D and to devise their own actions in this world (see subsection 8.3.2, page 201). The development of this expertise was pertinent to developing salience with the Figured world of HE.

Thus, it is the social interactions with other figures and with artefacts in a WP initiative, mediated via pupils' agency (by employing the strategies such as those described in the preceding paragraphs), that enable them to develop salience with the initiative. If this salience leads to expertise in the Figured World of a WP initiative, it has the potential, in the Marxist tradition of Figured Worlds (subsection 3.4.7, page 73), to create "possibilities for *becoming*" (Holland *et al.* 1998, pp.64, emphasis in original) HE participants or learners in the Figured World of HE. This concept is important because by understanding the mechanisms by which a WP initiative operates to achieve its aims, we can then work to refine our inputs and our input points.

How does participation in WP initiatives influence HE students? While the benefits for the HE students are acknowledged in terms of developing transferrable personal and professional qualities (Bunting and Williams 2017), there is little focus on the identity

development of student ambassadors or indeed peer mentors. The dental students in this study too authored their multiple intersecting identities (as student ambassadors, peer mentors and clinicians) whilst interacting in the multiple Figured Worlds of A2D and of clinical dentistry. They drew on their relative expertise in the Figured World of dentistry (subsection 8.2.1, page 166) to present information on dental education to school pupils. Some improvised from their previous experience as peer mentors to enable them to interact with pupils during campus visits (see section 6.2, page 120). They also recognised the potential value of artefacts such as communicating with mentee pupils as a skill for engaging communication with patients in the Figured World of clinical dentistry (subsection 8.2.2.2, page 177). Through a limited dataset on peer mentoring in A2D, the theoretical lens of Figured World directed attention towards the improvisation and artefacts that dental students appropriated and created identities in the intersecting worlds of dentistry and the WP initiative. The small contribution towards theoretical understanding of identity development of peer mentors is recorded here. However, it is imperative for future research to explore how this identity development can be shaped within and through WP initiatives.

The Figured Worlds lens also drew our attention to the mechanisms by which some social interactions failed to foster the formation of HE participant identities. For example, the Project Core Team faced difficulties with understanding what sort of activities would hold salience for pupils. From the point of view of WP practitioners at HEI, this is a difficult task, to devise activities which are sufficiently multi-level and flexible to meet a wide range of needs and preferences. The findings therefore demonstrated the importance of HEIs maintaining close partnership working with schools. Although there are studies that advocate this partnership between schools and HEIs (*e.g.*, Cotton *et al.* 2013), in the context of designing WP activities, the issues have not received sufficient attention in the literature. This thesis, therefore, contributes, to understanding how individuals interpret and respond to some issues that arise when enacting WP activities.

Some studies of WP initiatives are concerned with the fidelity of implementation of a WP initiative design (Skene *et al.* 2016). Through this lens improvisation amounts to lack of fidelity and is a fault diminishing the possibilities for cross-site comparison and

measurement, rather than an advance to be celebrated. The theoretical lens of Figured Worlds predicts such modifications, that is, improvisations, to enable its members to collaborate more effectively and work toward shared goals. Improvisation is positive and generates new artefacts (*e.g.*, 'keeping in touch school visits' to supplement 'introductory school visits' and to replace unattainable 'repeat campus visits' (subsection 8.3.2.1, page 202)) and improvisation seeds new social relationships. By analysing the collective social practice rather than focusing on individuals, Figured Worlds forces us to pay attention to particular facets of a phenomenon that we might otherwise ignore, in this case, the improvisations by the Project Core Team.

The Figured Worlds lens provided a way to understand WP as a complex partnership between schools and universities (or, indeed, other stakeholder groups). The theoretical underpinning provided by a Figured Worlds approach has added to the understanding of how WP initiatives evolve and what drives this evolution.

9.5. What is the contribution of this doctoral study?

This doctoral study was a longitudinal qualitative study that explored multiple perspectives in, and traced the evolution of, a long-term, evolving WP initiative through the Figured Worlds theoretical perspective and has contributed to the growing body of knowledge in this discipline. The thesis addresses the lack of detailed, comprehensive research into WP initiatives (also identified by systematic reviews such as Kaehne *et al.* 2014; Younger *et al.* 2019) through an in-depth understanding of:

- How stakeholder participants interact with and within WP initiatives
- How these stakeholders interpret the policies and activities that shape the WP initiatives
- What mechanisms are employed as the stakeholders enact their interpretations of the WP initiatives
- How WP initiatives evolve as a result of the interpretations, interactions and enactment of stakeholders

The first unique contribution of this thesis is that it expands current knowledge about targeting.

- The thesis provided a detailed exploration of the mechanisms and the drivers that enabled targeting amongst school staff and WP HEI staff
- By exploring how different schools in different contexts developed different strategies for targeting, this thesis firstly demonstrates that targeting is mediated locally and secondly offers a potentially transferrable conceptual model mapping these mechanisms (Figure 10, page 154) and drivers (Principles, Pragmatism, Prediction) which can be tested in other WP contexts.

The second unique contribution of this thesis is that it enhances understanding about the interpretation and enactment of activities that make up WP initiatives.

- Examination of the interpretation and enactment of activities in this WP initiative led to an understanding of the mechanism by which such initiatives can foster and enable (or deter) the development of learner/HE participant identities in pupils (and, to a limited extent, ambassador or mentor identities in HE students) and led to the development of a second conceptual model (Figure 15, page 210) that can help understand the strategies employed by pupils and HE students in this identity development.
- This in-depth understanding has implications for WP practitioners. By recognising the complexity of the partnership between schools and universities, HEI WP practitioners can work together with schools to develop activities that can facilitate strategies to enhance young people's engagement with WP initiatives and foster their learner identities.

The third area of contribution of this thesis is its application of the theoretical lens of Figured Worlds (Holland *et al.* 1998).

- This represents a novel use of a novel theory, that is, the Figured World lens provides novel theoretical insights into WP and researching a WP initiative contributes to the increasing applications of the Figured World lens.
- By conceptualising the WP initiative as a Figured World, the thesis has operationalised the analytical concepts of Figured Worlds. In particular, this

thesis has demonstrated the ways in which individuals author their identities and, through collective social action, shape the multiple Figured Worlds they inhabit. This is a lens through which we can celebrate and appreciate the importance and essential nature of improvisations, rather than see them as sites of failure.

- Furthermore, this thesis has utilised (or attempted to utilise) the full range of concepts that make up Figured Worlds, in contrast to previous research based on Figured Worlds; which often use the constituent theoretical concepts selectively. This operationalisation benefitted the study by providing unique insights into multiple perspectives shaping the evolving WP initiative. Development of Figured Worlds research should consider deeper theorisation in relation to agency.

9.6. Quality of the research work in relation to the research focus and research context

This qualitative doctoral research study provided an in-depth understanding of stakeholder perspectives on an evolving WP initiative. The reflexive stance adopted during this doctoral study acknowledged that what was represented or "erased from view" (Cousin 2010, p.10) was framed by my position as a researcher (discussed in section 5.5, page 111). The researcher position anchored my reflections related to the quality of this study *i.e.*, judging the trustworthiness (Creswell 2013) of the research. In evaluating the quality of this study, it was important to be reflexive about balancing the tension between being consistent, that is, providing methodological rigour, and being flexible, that is developing conceptual, theoretical and methodological creativity (Flick 2007). This tension, in turn, guided which strategies could be reasonably used to promote the quality of this thesis, by employing the criteria proposed by Lincoln and Guba (1985; Lincoln 1995): credibility, transferability, dependability, confirmability and authenticity:

- **Credibility** acknowledges the existence of multiple realities and of potential methodological bias which I sought to mediate, to some extent, via the strategies described below:
    - Prolonged contact with the data settings through the longitudinal research design
    - In-depth observation of settings and events in the form of field notes and research notes
    - Triangulation of findings which revealed the multiple constructions (Seale 1999) of events or processes (see, for example, page 138, to reveal, in this case, the contrasting perspective of the Project Core Team member and the evaluation document towards the evolution of targeting)
    - Member checking through regular email correspondence with some participants requesting clarification of interview data or, on one occasion, requesting clarification of field notes of interview data (see subsection 7.3.1.2, page 145)
- **Transferability** enables other researchers or readers to make judgements about the degree or similarity of the research to other contexts and is facilitated through thick, detailed descriptions of the research context.
    - A case-study methodology helped to fulfil this criterion by utilising a mix of participant narratives, detailed field notes and documentary artefacts in presenting richly textured and nuanced findings.
- **Dependability** refers to the trustworthiness of the research process and was achieved by the following:
    - A clear and detailed record of the research methods and study design (see Chapter 5)
    - Discussion of emerging themes with research supervisors and research diary-keeping, which recorded the challenges and the dilemmas of the research journey and which shaped the presentation of the findings (*e.g.*, the process of 'finding' the Figured Worlds theoretical lens)
    - Presentation of findings to internal institutional panels monitoring progress of the doctoral study

- **Confirmability** is achieved by demonstrating trustworthiness in the "re-present[ation]" (Cousin 2010, p.10) of the data.
    - Presentation of research (methodology and findings) at regional and international conferences to enable other members to question the emerging themes and methodological perspectives of this study
- **Authenticity** is concerned with the idea that a fair and balanced view of all participants is represented through the data, while acknowledging that:

    > "research accounts do no more than represent a sophisticated but temporary consensus of views about what is to be considered true." (Seale 1999, p.468)

    Authenticity in this research study was sought through the methodology and the presentation of findings:
    - The methodological stance underpinning this research, that is the weak constructionist epistemology and the in-depth case study methodology, enabled representation of multiple perspectives.
    - Presentation of different, sometimes conflicting, values and beliefs enabled the negotiation of recommendations arising from the findings (*e.g.*, see discussion related to targeting in A2D, subsection 9.4.1)

9.7. Limitations and strengths of study

The limitations arising from, and the strengths as a result of, this research study have been clearly identified at various stages of the research journey and detailed in the various sections of the thesis. It became clear that the limitations and strengths were complementary to one another and their separation at this point seemed artificial. This section is therefore divided into the characteristics of the research (*e.g.*, study design or researcher position) which were responsible for the limitations and strengths, enabling a more rounded discussion and therefore a coherent flow towards future recommendations.

9.7.1. Setting up and conducting the literature review

The literature review for the thesis was conducted utilising the databases listed in my institutional library and publications were limited to the English language (section 2.2, page 18). This naturally led to the exclusion of studies that were not indexed in the databases I used and of the small number of studies in languages other than English. However, the broad inclusion criteria, including empirical research and discursive texts, along with the decision not to exclude studies on quality, mitigated this concern by ensuring that there was both breadth and depth of understanding of existing knowledge of WP.

On the other hand, the systematic literature review of Figured Worlds focused on published empirical research, including those studies judged to be of high enough quality (section 4.3, page 80). I, as the single-handed researcher, carried out the quality assessment. This approach limited the numbers of studies that were included in the review and were naturally subject to my personal bias. However, I regularly discussed and shared the findings and quality assessment with my research supervisors in order to challenge my assumptions and biases. Furthermore, the systematic literature review drew attention to the (often inconsistent) approaches and the limited range of the analytical concepts utilised in the literature. The review strengthened my understanding of the complexity of the theory and enabled me to develop my conceptualisation of this theory in exploring A2D.

9.7.2. Considerations of study design

This study sample was limited in its scope by only including individuals that participated in A2D. A limitation of this sampling strategy was that some participants were, therefore, self-selected. Similar limitations are recorded by other studies (Torgerson *et al.* 2014). However, following Gartland (2015), although the findings do not represent the voices of those underrepresented in WP initiatives, the insights developed from researching this initiative may benefit both groups of young individuals – those excluded from, and those included in, this study.

Access to certain groups of participants, particularly at schools, was reliant on gatekeeper school staff and limited the nature and timing of data collection from this

group of individuals. However, access to participants was facilitated by developing reciprocity (discussed in subsection 5.4.2, page 109) and through my researcher status (reflected on in section 5.5, page 111).

Another limitation of the qualitative study design (which can be applied to most qualitative research) was that focusing on the particular case of A2D did not readily lend itself to generalisation and that any generalisations were necessarily those described as "moderatum" generalisations (Williams 2002, p.122). However, by acknowledging this limitation, the in-depth insights generated by adopting a qualitative approach enabled this thesis to see the structure and aspects of A2D, which can then also be examined as instances of the broader set of WP.

A strength of the study design was the case study methodology and the longitudinal design, which enabled insights through multiple perspectives and in-depth understanding of evolving perspectives.

9.7.3. Issues emerging from my researcher position

The issues arising from my researcher position mainly related to access to participants and to my dual position as a practitioner researcher and clinician (in specialist training).

The research was limited by the timing of data collection and whether or not data from some participants could be obtained. Further reflection at this point will enable the reader to understand the nuanced ways that my researcher position influenced the findings of this study. Data collection from all participants was conducted from 2013-2015 (Years 1-3 of A2D). However, data collection from stakeholders could not continue after 2015 owing to the timing of my specialist clinical training and by events such as professional examinations linked to the clinical training. However, I continued to have access to the Project Core Team, and documents generated by A2D. Whilst the continued data collection from the Project Core Team and documents is, arguably, a strength of the study design, which added more longitudinal contextualisation, the data needed careful handling. Some of the (early) developments explored in Chapters 6-8 were open for analysis from all perspectives, while the later evolution could only be approached through documents and the perspectives of Project Core Team members. Whilst this leaves some aspects of the findings less complete than might have been

desirable: where this temporal shift has occurred in this thesis, it has been stated clearly to avoid misleading readers and to support trustworthiness of the findings. These instances also fed into thinking about the formulation of recommendations for further research (section 9.8).

Nevertheless, my status as a practitioner-researcher meant that the thesis was able to provide ongoing formative insights that contributed to the evolution of this WP initiative (see, for example, page 193) and to the evaluation strategy of the HEI's overall WP policy (section 5.1, page 96).

9.7.4. The implications of the theoretical lens of Figured Worlds

The study was reflexive towards criticisms of the Figured Worlds theory in the literature, particularly as they related to the complexity of the theory, which have been discussed in subsection 3.4.9, page 75. However, I chose to utilise all the analytical concepts of this theory. Whilst this risked employing concepts that were perhaps not fully operationalised for research, particularly for research examining WP, my conceptualisation of the theory and its component concepts has, in fact, contributed to understanding and can contribute to future critique of the theory.

The focus on the collective social actions of individuals in A2D enhanced the research design of gathering multiple, intersecting and often conflicting perspectives. Furthermore, the Figured Worlds theory, in shaping individual identity and in being shaped through identities, was well-suited to exploring the dynamic and evolving WP initiative.

9.8. Recommendations

The thesis has provided detailed insights into a particular WP initiative. The research findings raised questions that may form the focus of future research. Furthermore, the research findings enabled some recommendations that could be adopted by stakeholders in Widening Participation.

Future directions for researchers of Widening Participation:

- Extend the findings of the current study. At the time of submission of this thesis, A2D was an established WP initiative that had been running for just over seven years. Some of the issues that arose through this research study may not be relevant as practices and partnerships with schools are established. Conversely, different issues may have arisen, which may direct further research. Furthermore, whilst this study was formative, future research could combine formative and summative evaluation.
- Conduct qualitative research to test the findings of this study – instrumental as well as theoretical – in other WP settings such as other newly developed or established WP initiatives which incorporate different combinations of activities (*e.g.*, summer schools).
- Research gaps identified by the thesis: exploration of schools and pupils not targeted for WP initiatives; of HEIs' drivers for targeting schools; of peer mentoring in WP initiatives, including electronic mentoring and the influence of peer mentoring on HE students.

Considerations for stakeholders – those involved in the design, delivery or utilisation of Widening Participation:

Recognise the importance of establishing partnerships with schools when designing WP initiatives:

- Consider the types of partnerships that might benefit both, schools and the HEI, whilst recognising that the benefits are for the partnership, not the individual stakeholders; *e.g.*, the creation of an SLA as a shared venture between the HEI and schools, in the conceptual space of the so-called "third space" (Gutiérrez *et al.* 1999, p.286), which facilitate generation of new knowledge and the development of a shared agenda.
- Consider the effects of these partnerships on targeting and on WP activities, *e.g.*, the schools' needs and concerns as they relate to WP initiatives, thereby maximising engagement by all stakeholders.

9.9. Conclusions

This thesis highlighted interesting insights into Widening Participation. A2D is a very ambitious, although undoubtedly powerful, model in establishing a long-term relationship between one HEI and schools. This model of WP is likely to be effective (in terms of outcomes like HE applications and HE entry) if the long-term relationship can be sustained. There are other similar models of WP described in the literature (Smith *et al.* 2013; Skene *et al.* 2016), both within the UK and in other countries. However, comprehensive research into these long-term WP initiatives is lacking. As this doctoral study has demonstrated, research into the multiple factors that shape particular WP initiatives is complex and time-consuming. There are few institutional drivers to support formative research (*i.e.*, of WP processes) when policy constraints of Access Agreements and institutional financial constraints are focused on evaluation of outcomes. These factors may explain the lack of the comprehensive research, which has been noted in recent systematic reviews of WP initiatives (Kaehne *et al.* 2014; Younger *et al.* 2019). What is evident in the literature (section 2.10, page 57) is that evaluation of WP initiatives is either atheoretical, or, when grounded in theory, takes a partial view, focusing on one or some of: social circumstances of young people participating in WP initiatives and the influences of these circumstances on their perceptions to HE; feedback monitoring from pupils, HE students, school staff or HEI WP staff; or outcome measures arising from the initiative, such as changes in perceptions towards HE or intention to progress to HE. This approach towards research is problematic for WP not least because WP initiatives (like research studies evaluating them) are complex and time-consuming and, as this study has shown, shaped by multiple, simultaneously facilitating and conflicting issues, which require careful examination.

This thesis was a novel study of WP, set in the UK context: it was a longitudinal qualitative study that explored multiple perspectives in a long-term WP initiative; the thesis was firmly grounded in the Figured Worlds theoretical perspective and it traced the evolution of the newly-developing WP initiative. The insights from this thesis have the liberatory potential to create a shift in thinking about WP from hegemonic dominant discourses of deficit towards the affirmative notions of improvisation, agency and identity that can guide the design of future WP initiatives.

References

1944 Education Act (7 & 8 Geo.6) 1944, s.35-40, London: Ministry of Education, available: http://www.educationengland.org.uk/documents/acts/1944-education-act.pdf [accessed 16 November 2012].

Action on Access (2008) *Higher Education Progression Framework Guide*, 2012, available: http://www.actiononaccess.org/wp-content/files_mf/progressionframeworkguide77.pdf [accessed.

Akinla, O., Hagan, P. and Atiomo, W. (2018) 'A systematic review of the literature describing the outcomes of near-peer mentoring programs for first year medical students', *BMC Medical Education*, 18(1), 98, available: http://dx.doi.org/10.1186/s12909-018-1195-1.

Alexander, K., Cleland, J. and Nicholson, S. (2019) 'Bridging the cultural divide? Exploring school pupils' perceptions of medicine', *Medical Education*, 0(0), available: http://dx.doi.org/10.1111/medu.13805.

Alexander, K., Fahey Palma, T., Nicholson, S. and Cleland, J. (2017) ''Why not you?' Discourses of widening access on UK medical school websites', *Medical Education*, 51(6), 598-611, available: http://dx.doi.org/10.1111/medu.13264.

Anders, J. (2012) 'The Link between Household Income, University Applications and University Attendance', *Fiscal Studies*, 33(2), 185, available: http://dx.doi.org/http://dx.doi.org/10.1111/j.1475-5890.2012.00158.x.

Andrews, J. and Clark, R. (2011) *Peer mentoring works! How peer mentoring enhances student success in higher education.*, Birmingham: Aston University, available: https://www.heacademy.ac.uk/system/files/aston_what_works_final_report_1.pdf [accessed 13 July 2018].

Anthony, S. and Jack, S. (2009) 'Qualitative case study methodology in nursing research: an integrative review', *Journal of Advanced Nursing*, 65(6), 1171-1181, available: http://dx.doi.org/10.1111/j.1365-2648.2009.04998.x.

Archer, L., DeWitt, J., Osborne, J., Dillon, J., Willis, B. and Wong, B. (2012) 'Science Aspirations, Capital, and Family Habitus: How Families Shape Children's Engagement and Identification With Science', *American Educational Research Journal*, 49(5), 881-908, available: http://dx.doi.org/10.3102/0002831211433290.

Archer, L., Hutchings, M. and Ross, A. (2003) *Higher education and social class: issues of exclusion and inclusion*, London: RoutledgeFalmer.

Ashworth, K.H., Jay. Hartfree, Yvette. Maguire, Sue. Middleton, Sue. Smith, Debbi. Dearden, Lorraine. Emmerson, Carl. Frayne, Christine. Meghir, Costas. (2002) *Education Maintenance Allowance: The First Two Years A Quantitative Evaluation - Brief : The Department for Education*: Loughborough University and IFS, available:

http://webarchive.nationalarchives.gov.uk/20130314122819/https://www.education.gov.uk/publications/RSG/publicationDetail/Page1/RB352#downloadableparts [accessed 02 October 2018].

Avraamidou, L. (2018) 'Stories we live, identities we build: how are elementary teachers' science identities shaped by their lived experiences?', *Cultural Studies of Science Education*, 1-27, available: http://dx.doi.org/http://dx.doi.org/10.1007/s11422-017-9855-8.

Baker, W., Sammons, P., Siraj-Blatchford, I., Sylva, K., Melhuish, E.C. and Taggart, B. (2014) 'Aspirations, education and inequality in England: insights from the Effective Provision of Pre-school, Primary and Secondary Education Project', *Oxford Review of Education*, 40(5), 525-542, available: http://dx.doi.org/10.1080/03054985.2014.953921.

Bakhtin, M., Holquist, M. and Emerson, C. (1981) *The dialogic imagination: four essays*, Austin: University of Texas Press.

Bakhurst, D. (2009) 'Reflections on activity theory', *Educational Review*, 61(2), 197-210, available: http://dx.doi.org/10.1080/00131910902846916.

Ball, S., J. (2010) 'New class inequalities in education', *International Journal of Sociology and Social Policy*, 30(3/4), 155-166, available: http://dx.doi.org/10.1108/01443331011033346.

Ball, S.J., Reay, D. and David, M. (2002) ''Ethnic Choosing': Minority ethnic students, social class and higher education choice', *Race Ethnicity and Education*, 5(4), 333-357, available: http://dx.doi.org/10.1080/1361332022000030879.

Ball, S.J. and Vincent, C. (1998) ''I Heard It on the Grapevine': 'Hot' Knowledge and School Choice', *British Journal of Sociology of Education*, 19(3), 377-400.

Barr, N. (1989) 'The White Paper on Student Loans', *Journal of Social Policy*, 18(03), 409-417.

Barr, N. (2012) 'The Higher Education White Paper: The Good, the Bad, the Unspeakable – and the Next White Paper1', *Social Policy & Administration*, 46(5), 483-508, available: http://dx.doi.org/10.1111/j.1467-9515.2012.00852.x.

Bartlett, L. (2007) 'To seem and to feel: Situated identities and literacy practices', *Teachers College Record*, 109(1), 51-69.

Bartlett, L. and Holland, D. (2002) 'Theorizing the space of literacy practices', *Ways of knowing journal*, 2(1), 10-22.

Basit, T.N. (2012) ''My parents have stressed that since I was a kid': Young Minority Ethnic British Citizens and the Phenomenon of Aspirational Capital', *Education, Citizenship and Social Justice*, 7(2), 129-143, available: http://dx.doi.org/10.1177/1746197912440857.

Bassett, A.M., Brosnan, C., Southgate, E. and Lempp, H. (2018) 'Transitional journeys into, and through medical education for First-in-Family (FiF) students: a qualitative interview study', *BMC medical education*, 18(1), 102, available: http://dx.doi.org/10.1186/s12909-018-1217-z.

Baszanger, I. and Dodier, N. (2004) 'Ethnography. Relating the part to the whole.' in Seale, C., Gobo, G., Gubrium, J. F. and Silverman, D., eds., *Qualitative research practice*, London: Sage, 8-34.

Bathmaker, A.-M., Ingram, N. and Waller, R. (2013) 'Higher education, social class and the mobilisation of capitals: recognising and playing the game', *British Journal of Sociology of Education*, 34(5-06), 723-743, available: http://dx.doi.org/10.1080/01425692.2013.816041.

Baxter, P. and Jack, S. (2008) 'Qualitative case study methodology: study design and implementation for novice researchers', *Qualitative report*, 13(4), 544.

Bennett, D., Solomon, Y., Bergin, C., Horgan, M. and Dornan, T. (2017) 'Possibility and agency in Figured Worlds: becoming a 'good doctor'', *Med Educ*, 51(3), 248-257, available: http://dx.doi.org/10.1111/medu.13220.

Bibbings, L.S. (2006) 'Widening Participation and Higher Education', *Journal of Law and Society*, 33(1), 74-91.

Bierema, L.L. and Merriam, S.B. (2002) 'E-mentoring: Using Computer Mediated Communication to Enhance the Mentoring Process', *Innovative Higher Education*, 26(3), 211-227, available: http://dx.doi.org/10.1023/A:1017921023103.

BIS (2009) *Higher Ambitions. The Future of Universities in a Knowledge Economy*, London: BIS, available: http://webarchive.nationalarchives.gov.uk/+/http://www.bis.gov.uk/wp-content/uploads/publications/Higher-Ambitions.pdf [accessed 20 February 2013].

BIS (2011a) *Higher Education: Students at the heart of the system*, London: HMSO, available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/31384/11-944-higher-education-students-at-heart-of-system.pdf http://www.bis.gov.uk/assets/biscore/higher-education/docs/h/11-944-higher-education-students-at-heart-of-system.pdf [accessed 25 January 2013].

BIS (2011b) *National Scholarship Programme: year 1* [press release], 10 February 2011, available: https://www.gov.uk/government/publications/national-scholarship-programme-year-1 [accessed 15 December 2019].

BIS (2016) *Success as a Knowledge Economy: Teaching Excellence, Social Mobility & Student Choice*, London: HMSO, available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/523396/bis-16-265-success-as-a-knowledge-economy.pdf [accessed 22 May 2016].

Boliver, V. (2013) 'How fair is access to more prestigious UK universities?', *The British Journal of Sociology*, 64(2), 344-364, available: http://dx.doi.org/10.1111/1468-4446.12021.

Bomer, R. and Laman, T. (2004) 'Positioning in a Primary Writing Workshop: Joint Action in the Discursive Production of Writing Subjects', *Research in the Teaching of English*, 38(4), 420-466.

Bourdieu, P. (1986) 'The Forms of Capital' in Richardson, J., ed., *Handbook of Theory and Research for the Sociology of Education*, New York: Greenwood Press, 241-258.

Bourdieu, P. (2000) 'The Politics of Protest. An interview with Kevin Ovenden', *Socialist Review*, (242), 18-20.

Bourdieu, P. and Johnson, R. (1993) *The Field of Cultural Production: Essays on Art and Literature*, Polity P.

Bowes, L.J., Stephen. Thomas, Liz. Moreton, Rachel. Birkin, Guy. Nathwani, Tej. (2013) *The Uses and Impact of HEFCE Funding for Widening Participation: Report to HEFCE by CFE and Edge Hill University*: HEFCE, available: http://www.hefce.ac.uk/media/hefce/content/pubs/indirreports/2013/usesandimpactofwpfunding/The%20uses%20and%20impact%20of%20HEFCE%20funding%20for%20widening%20participation.pdf [accessed 13 March 2013].

Bowl, M. (2012) *The contribution of further education and sixth-form colleges to widening participation. A literature synthesis of the WASRS national programmes archive | Advance HE*, York: Higher Education Academy, available: https://www.advance-he.ac.uk/knowledge-hub/contribution-further-education-and-sixth-form-colleges-widening-participation [accessed 21 January 2020].

Braun, V. and Clarke, V. (2019a) 'Reflecting on reflexive thematic analysis', *Qualitative Research in Sport, Exercise and Health*, 11(4), 589-597, available: http://dx.doi.org/10.1080/2159676X.2019.1628806.

Braun, V. and Clarke, V. (2019b) *Thematic analysis - a reflexive approach.*, The University of Auckland, available: https://www.psych.auckland.ac.nz/en/about/thematic-analysis.html [accessed 06-07-2020].

Bravenboer, D. (2013) 'The official discourse of fair access to higher education', *Widening Participation and Lifelong Learning*, 14(3), 120-140.

Brennan, J. (2012) 'Is There a Future for Higher Education Institutions in the Knowledge Society?', *European Review*, 20(02), 195-202, available: http://dx.doi.org/10.1017/S1062798711000421.

Britton, J. and Dearden, L. (2015) *The 16 to 19 bursary fund: impact evaluation*: Institute for Fiscal Studies & Institute of Education, available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/446296/RR414_-_The_16_to_19_Bursary_Fund__Impact_Evaluation.pdf [accessed 02 October 2018].

Brosnan, C., Southgate, E., Outram, S., Lempp, H., Wright, S., Saxby, T., Harris, G., Bennett, A. and Kelly, B. (2016) 'Experiences of medical students who are first in family to attend university', *Medical Education*, 50(8), 842-851, available: http://dx.doi.org/10.1111/medu.12995.

Brown, N. and Ramsden, B. (2007) *Variable Tuition Fees in England: Assessing their Impact on Students and Higher Education Institutions. Fourth Report*, London: Universities UK, available: http://www.universitiesuk.ac.uk/Publications/Documents/VariableTuitionFees_FourthReport.pdf [accessed 31 January 2013].

Bryman, A. (2004) *Social Research Methods*, 2nd ed., New York, United States: Oxford University Press.

Budd, R. (2016) 'Disadvantaged by degrees? How widening participation students are not only hindered in accessing HE, but also during – and after – university', *Perspectives: Policy and Practice in Higher Education*, 1-6, available: http://dx.doi.org/10.1080/13603108.2016.1169230.

Bunce, L., Baird, A. and Jones, S.E. (2017) 'The student-as-consumer approach in higher education and its effects on academic performance', *Studies in Higher Education*, 42(11), 1958-1978, available: http://dx.doi.org/10.1080/03075079.2015.1127908.

Bunting, B. and Williams, D. (2017) 'Stories of transformation: using personal narrative to explore transformative experience among undergraduate peer mentors', *Mentoring & Tutoring: Partnership in Learning*, 25(2), 166-184, available: http://dx.doi.org/10.1080/13611267.2017.1327691.

Burke, A. (2019) 'Student Retention Models in Higher Education: A Literature Review', *College and University*, 94(2), 12-21.

Burr, V. (2006) *An introduction to social constructionism*, London: Taylor and Francis.

Butler, A., Hall, H. and Copnell, B. (2016) 'A Guide to Writing a Qualitative Systematic Review Protocol to Enhance Evidence-Based Practice in Nursing and Health Care', *Worldviews on Evidence-Based Nursing*, 13(3), 241-249, available: http://dx.doi.org/10.1111/wvn.12134.

Cabinet Office (2009) *New opportunities. Fair Chances for the Future*: HMSO, available: http://www.official-documents.gov.uk/document/cm75/7533/7533.pdf [accessed 22 February 2013].

Callender, C. and Jackson, J. (2008) 'Does the fear of debt constrain choice of university and subject of study?', *Studies in Higher Education*, 33(4), 405-429, available: http://dx.doi.org/10.1080/03075070802211802.

Caraballo, L. (2012) 'Identities-in-Practice in a Figured World of Achievement: Toward Curriculum and Pedagogies of Hope', *Journal of Curriculum Theorizing*, 28(2), 43-59, available: http://dx.doi.org/http://journal.jctonline.org/index.php/jct/article/view/364.

Carragher, J. and McGaughey, J. (2016) 'The effectiveness of peer mentoring in promoting a positive transition to higher education for first-year undergraduate students: a mixed methods systematic review protocol', *Syst Rev*, 5, 68, available: http://dx.doi.org/10.1186/s13643-016-0245-1.

Carter, E.W., Gustafson, J.R., Mackay, M.M., Martin, K.P., Parsley, M.V., Graves, J., Day, T.L., McCabe, L.E., Lazarz, H., McMillan, E.D., Schiro-Geist, C., Williams, M., Beeson, T. and Cayton, J. (2018) 'Motivations and Expectations of Peer Mentors Within Inclusive Higher Education Programs for Students With Intellectual Disability', *Career Development and Transition for Exceptional Individuals*, 42(3), 168-178, available: http://dx.doi.org/10.1177/2165143418779989.

Castro, J.F., Yamada, G. and Arias, O. (2016) 'Higher education decisions in Peru: on the role of financial constraints, skills, and family background', *Higher Education*, 72(4), 457-486, available: http://dx.doi.org/10.1007/s10734-016-0040-x.

Chang, A. (2014) 'Identity production in figured worlds: How some multiracial students become racial atravesados/as', *The Urban Review*, 46(1), 25.

Chang, A., Torrez, M.A., Ferguson, K.N. and Sagar, A. (2017) 'Figured Worlds and American Dreams: An Exploration of Agency and Identity Among Latinx Undocumented Students', *The Urban Review*, 49(2), 189-216, available: http://dx.doi.org/10.1007/s11256-017-0397-x.

Chong, J.Y., Ching, A.H., Renganathan, Y., Lim, W.Q., Toh, Y.P., Mason, S. and Krishna, L.K.R. (2019) 'Enhancing mentoring experiences through e-mentoring: a systematic scoping review of e-mentoring programs between 2000 and 2017', *Advances in Health Sciences Education*, available: http://dx.doi.org/10.1007/s10459-019-09883-8.

Chowdry, H., Crawford, C., Dearden, L., Goodman, A. and Vignoles, A. (2010) *Widening participation in higher education: analysis using linked administrative data*, London: Institute for Fiscal Studies, available: https://www.ifs.org.uk/publications/4951 [accessed 28 September 2018].

Chowdry, H., Crawford, C., Dearden, L., Goodman, A. and Vignoles, A. (2013) 'Widening Participation in Higher Education: Analysis using Linked Administrative Data', *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 176(2), 431-457, available: http://dx.doi.org/10.1111/j.1467-985X.2012.01043.x.

Clark, R. and Andrews, J. (2009) *Peer mentoring in higher education: a literature review*, Birmingham: Aston University, available: http://publications.aston.ac.uk/17985/ [accessed, available: https://pdfs.semanticscholar.org/9f7a/cb20c9d2d4586493703d5e32a4262c03fdfa.pdf [accessed 11 July 2018].

Cleland, J., Dowell, J., McLachlan, J., Nicholson, S. and Patterson, F. (2012) *Identifying best practice in the selection of medical students (literature review and interview survey)*, London: General Medical Council, available: http://www.gmc-uk.org/Identifying_best_practice_in_the_selection_of_medical_students.pdf_51119804.pdf [accessed.

Cleland, J.A., Nicholson, S., Kelly, N. and Moffat, M. (2015) 'Taking context seriously: explaining widening access policy enactments in UK medical schools', *Medical Education*, 49(1), 25-35, available: http://dx.doi.org/10.1111/medu.12502.

Cogan, A.M. (2016) 'Community reintegration: Transition between the figured worlds of military and family life', *Journal of Occupational Science*, 23(2), 255-265, available: http://dx.doi.org/10.1080/14427591.2015.1114509.

Coleman, J. (1988) 'Social Capital in the Creation of Human Capital', *American Journal of Sociology*, 94(Supplement: Organizations and Institutions:Sociological and Economic Approaches to the Analysis of Social Structure), S95-S120.

Collings, R., Swanson, V. and Watkins, R. (2014) 'The impact of peer mentoring on levels of student wellbeing, integration and retention: a controlled comparative evaluation of residential students in UK higher education', *Higher Education*, 68(6), 927-942, available: http://dx.doi.org/10.1007/s10734-014-9752-y.

Conneeley, A.L. (2002) 'Methodological Issues in Qualitative Research for the Researcher/Practitioner', *The British Journal of Occupational Therapy*, 65(4), 185-190.

Cook, C. (2012) 'School system hinders university access - FT.com', *Financial Times [online]*, (24 February 2012), available: http://www.ft.com/cms/s/0/8da6c68c-5e64-11e1-8c87-00144feabdc0.html#axzz2bHRE2lzE [accessed 07 August 2013].

Cotton, D., Kneale, P. and Nash, M.T. (2013) 'Horizon scanning report: widening participation'.

Coughlan, S. (2013) 'BBC News - US college degree still worth it, says study', *BBC News-Education and Family*, (9 January 2013), available: http://www.bbc.co.uk/news/education-20958928 [accessed 11 January 2013].

Coughlan, S. (2016) 'Tuition fee rise 'sneaked out' on website - BBC News', *BBC News*, (22 December 2016), available: http://www.bbc.co.uk/news/education-38406733 [accessed 28 December 2016].

Cousin, G. (2010) 'Positioning positionality: the refl exive turn' in *New approaches to qualitative research* Routledge, 25-34.

Crawford, C. (2014) *The link between secondary school characteristics and university participation and outcomes*, London: Department for Education, available: https://www.ifs.org.uk/publications/7235 [accessed 29 July 2019].

Creswell, J.W. (2013) *Qualitative inquiry and research design : choosing among five approaches*, 3rd ed., Los Angeles ; London: Los Angeles ; London : SAGE.

Crisp, G. and Cruz, I. (2009) 'Mentoring College Students: A Critical Review of the Literature Between 1990 and 2007', *Research in Higher Education*, 50(6), 525-545, available: http://dx.doi.org/10.1007/s11162-009-9130-2.

Critical Appraisal Skills Programme (2018) *CASP Qualitative Checklist. [online]*, available: https://casp-uk.net/wp-content/uploads/2018/01/CASP-Qualitative-Checklist-2018.pdf [accessed 23 March 2016].

Crotty, M. (1998) *The Foundations of Social Research : Meaning and Perspective in the Research Process*, London: Sage.

Cullinan, J., Flannery, D., Walsh, S. and McCoy, S. (2013) 'Distance Effects, Social Class and the Decision to Participate in Higher Education in Ireland*', *The Economic and Social Review*, 44(1), 19-51.

Curnock-Cook, M. (2012) *End of Cycle report 2012*, Cheltenham: UCAS19 April 2013].

Dagenais, D., Day, E. and Toohey, K. (2006) 'A Multilingual Child's Literacy Practices and Contrasting Identities in the Figured Worlds of French Immersion Classrooms', *International Journal of Bilingual Education and Bilingualism*, 9(2), 205-218, available: http://dx.doi.org/10.1080/13670050608668641.

Daniels, H. (2007) 'Discourse and Identity in Cultural–Historical Activity Theory: A Response', *International Journal of Educational Research*, 46(1–2), 94-99, available: http://dx.doi.org/http://dx.doi.org/10.1016/j.ijer.2007.07.009.

Davies, P., Qiu, T. and Davies, N.M. (2014) 'Cultural and human capital, information and higher education choices', *Journal of Education Policy*, 29(6), 804-825, available: http://dx.doi.org/10.1080/02680939.2014.891762.

Delamont, S. (2004) 'Ethnography and participant observation' in Seale, C., Gobo, G., Gubrium, J. F. and Silverman, D., eds., *Qualitative research practice*, London: SAGE Publications Ltd, 205-217.

Dent, P., Garton, E., Hooley, T., Leonard, C., Marriott, J. and Moore, N. (2012) *Higher Education Outreach to Widen Participation. Toolkits for practitioners. Targeting*, available: Available from http://www.heacademy.ac.uk/assets/documents/WP_tools/toolkits/Targeting.pdf [accessed 21 October 2013].

Dent, P., Garton, E., Hooley, T., Leonard, C., Marriott, J. and Moore, N. (2013) *Higher education outreach to widen participation: toolkits for practitioners. Targeting*, available: http://www.heacademy.ac.uk/resources/detail/WP_outreach_toolkits/targeting [accessed 13 January 2014].

Dent, P., Garton, E., Hooley, T., Leonard, C., Marriott, J. and Moore, N. (2014) *HE outreach to widen participation: toolkits for practitioners. Programmes*, available: https://www.heacademy.ac.uk/knowledge-hub/he-outreach-widen-participation-toolkits-practitioners-programmes [accessed 20 February 2018].

Department for Education (2016) *Participation rates in higher education: 2006 to 2015*, available: https://www.gov.uk/government/statistics/participation-rates-in-higher-education-2006-to-2015, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/552886/HEIPR_PUBLICATION_2014-15.pdf [accessed 06 March 2017].

Department for Education and Employment (1998) *Higher Education for the 21st Century*, available: http://www.lifelonglearning.co.uk/dearing/index.htm [accessed 15 February 2013].

Department for Education and Skills (2003) *The Future of Higher Education*: HMSO, available: http://www.bis.gov.uk/assets/BISCore/corporate/MigratedD/publications/F/future_of_he.pdf [accessed 7 November 2012].

Dobson, T. and Stephenson, L. (2017) 'Primary Pupils' Creative Writing: Enacting Identities in a Community of Writers', *Literacy*, 51(3), 162-168.

Donnelly, M. and Evans, C. (2016) 'Framing the geographies of higher education participation: schools, place and national identity', *British Educational Research Journal*, 42(1), 74-92, available: http://dx.doi.org/10.1002/berj.3196.

Dornan, T., Pearson, E., Carson, P., Helmich, E. and Bundy, C. (2015) 'Emotions and identity in the figured world of becoming a doctor', *Medical Education*, 49(2), 174-185, available: http://dx.doi.org/10.1111/medu.12587.

Dos Reis, K.M.Y.D. (2018) 'Peer mentoring: Enhancing economics first years' academic performance', *South African Journal of Higher Education*, 32(6), 234-250, available: http://dx.doi.org/https://www.journals.ac.za/index.php/sajhe/article/view/2979.

Doyle, M. and Griffin, M. (2012) 'Raised Aspirations and Attainment? A Review of the Impact of Aimhigher (2004–2011) on Widening Participation in Higher Education in England', *London Review of Education*, 10(1), 75-88, available: http://dx.doi.org/10.1080/14748460.2012.659060.

Drummond, A., Halsey, R., Lawson, M. and van Breda, M. (2012) 'The effectiveness of a university mentoring project in peri-rural Australia', *Australian and International Journal of Rural Education*, 22(2), 29.

Duckworth, V. (2015) 'Extending the mentor role in initial teacher education: embracing social justice', *International Journal of Mentoring and Coaching in Education*, 4(1), 4-20, available: http://dx.doi.org/10.1108/IJMCE-08-2014-0032.

Duncheon, J.C. and Relles, S.R. (2018) '"A Ditcher and a Scholar": Figuring College-Going Identities in an Urban Magnet High School', *Teachers College Record*, 121(2).

Eder, D. and Fingerson, L. (2002) 'Interviewing children and adolescents' in Gubrium, J. F. and Holstein, J. A., eds., *Handbook of interview research: Context and method* Sage Publications Inc., 181-201.

Education Act 1962 (11 & 12 Eliz. 2) 1962, London: HMSO, available: http://www.educationengland.org.uk/documents/pdfs/1962-education-act.pdf [accessed 15 February 2013].

Egege, S. and Kutieleh, S. (2015) 'Peer mentors as a transition strategy at University: Why mentoring needs to have boundaries', *Australian Journal of Education*, 59(3), 265-277, available: http://dx.doi.org/10.1177/0004944115604697.

Elliot, M. (2012) 'Figured world of eating disorders: Occupations of illness.', *Canadian Journal of Occupational Therapy*, 79(1), 15-22, available: http://cjo.sagepub.com/content/79/1/15.full.pdf [accessed 22 November 2013].

Engeström, Y. (2001) 'Expansive Learning at Work: Toward an activity theoretical reconceptualization', *Journal of Education and Work*, 14(1), 133-156, available: http://dx.doi.org/10.1080/13639080020028747.

Esbensen, G.L. and Hasse, C. (2015) 'Technology in Intersecting Figured Worlds', *Stud Health Technol Inform*, 215, 95-105.

Fayram, J., Boswood, N., Kan, Q., Motzo, A. and Proudfoot, A. (2018) 'Investigating the benefits of online peer mentoring for student confidence and motivation', *International Journal of Mentoring and Coaching in Education*, 7(4), 312-328.

Finch, H. and Lewis, J. (2003) 'Focus Groups' in Ritchie, J. and Lewis, J., eds., *Qualitative Research Practice*, London: Sage, 170-198.

Fleming, M.J. and Grace, D.M. (2015) 'Eyes on the future: The impact of a university campus experience day on students from financially disadvantaged backgrounds', *Australian Journal of Education*, 59(1), 82-96.

Flick, U. (2007) 'Quality in qualitative research' in *Designing Qualitative Research*, London: SAGE Publications, Ltd, 61-67.

Fox, M., Green, G. and Martin, P.J. (2007) *Doing practitioner research*, London: SAGE.

Foy, C. and Keane, A. (2017) 'Introduction of a peer mentoring scheme within biomedical sciences education – easing the transition to university life', *Journal of Further and Higher Education*, 1-9, available: http://dx.doi.org/10.1080/0309877X.2017.1311994.

Further and Higher Education Act 1992, s.63-64, London: HMSO, available: http://www.legislation.gov.uk/ukpga/1992/13/pdfs/ukpga_19920013_en.pdf [accessed 06 November 2012].

Gale, T., Tranter, D., Bills, D., Hattam, R. and Comber, B. (2010) *Interventions early in school as a means to improve higher education outcomes for disadvantaged (particularly low SES) students: Component A: A review of the Australian and international literature*, Australia: Department of Education.

Gartland, C. (2013) 'Marketing participation: Student ambassadors' contribution to widening participation in engineering and medicine at two contrasting universities', *Widening Participation and Lifelong Learning*, 14(3), 102-119.

Gartland, C. (2015) 'Student ambassadors: 'role-models', learning practices and identities', *British Journal of Sociology of Education*, 36(8), 1192-1211, available: http://dx.doi.org/10.1080/01425692.2014.886940.

Gaztambide-Fernández, R.A. and Howard, A. (2012) 'Access, Status, and Representation: Some Reflections from Two Ethnographic Studies of Elite Schools', *Anthropology & Education Quarterly*, 43(3), 289-305, available: http://dx.doi.org/10.1111/j.1548-1492.2012.01181.x.

Gee, J.P. (2010) *An introduction to discourse analysis theory and method*, New York: New York : Routledge.

Gee, J.P.C.U.C.L.L.M.S.D.S. (2010) *An introduction to discourse analysis theory and method /James Paul Gee*, New York: New York : Routledge.

Gershenfeld, S. (2014) 'A Review of Undergraduate Mentoring Programs', *Review of Educational Research*, XX(X), 1-27, available: http://dx.doi.org/10.3102/0034654313520512.

Gewirtz, S. (2001) 'Cloning the Blairs: New Labour's programme for the re-socialization of working-class parents', *Journal of Education Policy*, 16(4), 365-378, available: http://dx.doi.org/10.1080/02680930110054353.

Girotti, J.A., Park, Y.S. and Tekian, A. (2015) 'Ensuring a fair and equitable selection of students to serve society's health care needs', *Medical Education*, 49(1), 84-92, available: http://dx.doi.org/10.1111/medu.12506.

Gorard, S., Boliver, V., Siddiqui, N. and Banerjee, P. (2017) 'Which are the most suitable contextual indicators for use in widening participation to HE?', *Research Papers in Education*, 1-31, available: http://dx.doi.org/10.1080/02671522.2017.1402083.

Gorard, S., See, B.H. and Davies, P. (2012) *Attitudes and aspirations in educational attainment: exploring causality*, York: Joseph Rowntree Foundation, available: https://www.researchgate.net/publication/265288552_The_impact_of_attitudes_and_aspirations_on_educational_attainment_and_participation [accessed 15 November 2015].

Gorard, S., Smith, E., May, H., Thomas, L., Adnett, N. and Slack, K. (2006) *Review of widening participation research: addressing the barriers to participation in higher education*, available: http://dera.ioe.ac.uk/6204/1/barriers.pdf [accessed 15 November 2012].

Griffin, B. and Hu, W. (2015) 'The interaction of socio-economic status and gender in widening participation in medicine', *Medical Education*, 49(1), 103-113, available: http://dx.doi.org/10.1111/medu.12480.

Grove, J. (2013) 'Aimhigher 2: this time it's slimmer', *Times Higher Education*, (07 March 2013), available: http://www.timeshighereducation.co.uk/news/aimhigher-2-this-time-its-slimmer/2002359.article [accessed 09 January 2015].

Grove, J. (2017) 'National Student Survey 2017: campuses omitted after NUS boycott', *Times Higher Education*, 09 August 2017, available: https://www.timeshighereducation.com/news/national-student-survey-2017-campuses-omitted-after-nus-boycott [accessed 24 January 2019].

Gutiérrez, K.D., Baquedano-López, P. and Tejeda, C. (1999) 'Rethinking diversity: Hybridity and hybrid language practices in the third space', *Mind, Culture, and Activity*, 6(4), 286-303, available: http://dx.doi.org/10.1080/10749039909524733.

Handscomb, G.G., Quing. Varley, Matt. (2014) *School-University Partnerships: Fulfilling the Potential. Literature Review*, Bristol: NCCPE, available: https://www.publicengagement.ac.uk/sites/default/files/publication/literature_review_final.pdf [accessed.

Harris, S.M. (2010) *What more can be done to widen access to hghly selective universities?*, London: OFFA, available: http://www.offa.org.uk/wp-content/uploads/2010/05/Report-on-access-to-highly-selective-universities.pdf [accessed 05 September 2012].

Harrison, A. (2012a) 'University tuition fees 'affecting applications' says panel', *BBC News Education and Family [online]*, (09 August 2012), available: http://www.bbc.co.uk/news/education-19182000 [accessed 19 April 2013].

Harrison, N. (2012b) 'The mismeasure of participation: how choosing the 'wrong' statistic helped seal the fate of Aimhigher', *Higher Education Review*, 45(2), 30-61, available: http://eprints.uwe.ac.uk/17900 [accessed 08 February 2016].

Harrison, N. (2019) 'Students-as-insurers: rethinking 'risk' for disadvantaged young people considering higher education in England', *Journal of Youth Studies*, 22(6), 752-771, available: http://dx.doi.org/10.1080/13676261.2018.1535174.

Harrison, N., Chudry, F., Waller, R. and Hatt, S. (2015) 'Towards a typology of debt attitudes among contemporary young UK undergraduates', *Journal of Further and Higher Education*, 39(1), 85-107, available: http://dx.doi.org/10.1080/0309877X.2013.778966.

Harrison, N. and Hatt, S. (2010) ''Disadvantaged Learners': Who Are We Targeting? Understanding the Targeting of Widening Participation Activity in the United Kingdom Using Geo-Demographic Data From Southwest England', *Higher Education Quarterly*, 64(1), 65-88, available: http://dx.doi.org/10.1111/j.1468-2273.2009.00431.x.

Harrison, N. and McCaig, C. (2015) 'An ecological fallacy in higher education policy: the use, overuse and misuse of 'low participation neighbourhoods'', *Journal of Further and Higher Education*, 39(6), 793-817, available: http://dx.doi.org/10.1080/0309877X.2013.858681.

Harrison, N., Vigurs, K., Crockford, J., McCaig, C., Squire, R. and Clark, L. (2018) *Understanding the evaluation of access and participation outreach interventions for under 16 year olds*: Office for Students, available: https://www.officeforstudents.org.uk/media/a8ad5c94-7a33-4b53-8f09-824d0705f073/ofs2018_apevaluation.pdf [accessed 14 December 2018].

Harrison, N. and Waller, R. (2017) 'Success and Impact in Widening Participation Policy: What Works and How Do We Know?', *Higher Education Policy*, 30(2), 141-160, available: http://dx.doi.org/http://dx.doi.org/10.1057/s41307-016-0020-x.

Harrison, N., Waller, R. and Last, K. (2015) *The evaluation of widening participation activities in higher education: A survey of institutional leaders in England.*, Bristol, UK: University of the West of England, available: http://eprints.uwe.ac.uk/26590 [accessed 22/01/2018].

Harwood, V., McMahon, S., O'Shea, S., Bodkin-Andrews, G. and Priestly, A. (2015) 'Recognising aspiration : the AIME program's effectiveness in inspiring Indigenous young people's participation in schooling and opportunities for further education and employment', *Australian Educational Researcher*, 42(2), 217-236, available: http://dx.doi.org/http://dx.doi.org/10.1007/s13384-015-0174-3.

Hatcher, R. and Le Gallais, T. (2008) *The work experience placements of secondary school students: widening horizons or reproducing social inequality?*, available: Available at http://www.educationandemployers.org/media/13203/the_work_experience_placements_of_secondary_school_students.pdf [accessed 12 August 2013].

Hatt, S., Baxter, A. and Tate, J. (2005) 'Who benefits from widening participation? A study of targeting in the South West of England', *Journal of Further and Higher Education*, 29(4), 341-351, available: http://dx.doi.org/10.1080/03098770500353508.

Havergal, C. (2016) 'Latest university access policy change prompts criticism', *THE*, available: https://www.timeshighereducation.com/news/latest-university-access-policy-change-prompts-criticism [accessed 27 March 2017].

Haynes, G., McCrone, T. and Wade, P. (2013) 'Young people's decision-making: the importance of high quality school-based careers education, information, advice and guidance', *Research Papers in Education*, 28(4), 459-482, available: http://dx.doi.org/10.1080/02671522.2012.727099.

HEFCE (2003) *Schooling effects on higher education achievement*.HEFCE, available: http://webarchive.nationalarchives.gov.uk/20100202100434/http://www.hefce.ac.uk/pubs/hefce/2003/03_32/03_32.pdf [accessed 03 March 2017].

HEFCE (2010) *Aimhigher summer schools*: HEFCE, available: http://webarchive.nationalarchives.gov.uk/20160106170200/http://www.hefce.ac.uk/pubs/year/2010/201032/ [accessed 08 October 2018].

HEFCE (2011) *Aimhigher Associates Scheme. Patterns of participation during the first year*, available: http://www.hefce.ac.uk/media/hefce/content/pubs/2011/201135/11_35.pdf [accessed September 2012].

HEFCE (2015) *National networks to help more young people access higher education*, available: http://www.hefce.ac.uk/news/newsarchive/2015/news99631.html http://www.hefce.ac.uk/news/newsarchive/2015/Name,100762,en.html [accessed 09 January 2015].

HEFCE (2016a) *A new approach to widening participation in higher education*, available: http://www.hefce.ac.uk/news/newsarchive/2016/Name,111712,en.html [accessed 08 December 2016].

HEFCE (2016b) *Degree apprenticeships - Higher Education Funding Council for England*, available: http://www.hefce.ac.uk/ke/apprentice/ [accessed 27 March 2017].

HEFCE (2017) *Medicine and dentistry intake targets - Higher Education Funding Council for England*, Higher Education Funding Council for England, available: http://www.hefce.ac.uk/lt/healthcare/intake/ [accessed 24 June 2018].

HEFCE (2018a) *Medicine and dentistry - Higher Education Funding Council for England*, Higher Education Funding Council for England, available: http://www.hefce.ac.uk/lt/healthcare/ [accessed 24 June 2018].

HEFCE (2018b) *NCOP Year 1 report of the national formative and impact evaluation - Higher Education Funding Council for England*: Higher Education Funding Council for England, available: http://www.hefce.ac.uk/pubs/rereports/year/2018/ncopyear1/ [accessed 15 April 2018].

Helmich, E., Yeh, H.-M., Yeh, C.-C., de Vries, J., Fu-Chang Tsai, D. and Dornan, T. (2017) 'Emotional Learning and Identity Development in Medicine: A Cross-Cultural Qualitative Study Comparing Taiwanese and Dutch Medical Undergraduates', *Academic Medicine: Journal Of The Association Of American*

Medical Colleges, 92(6), 853-859, available: http://dx.doi.org/10.1097/ACM.0000000000001658.

Higher Education Act 2004, London: HMSO, available: http://webarchive.nationalarchives.gov.uk/20110119064228/http://legislation.gov.uk/ukpga/2004/8/pdfs/ukpga_20040008_en.pdf [accessed 16 November 2012].

Hill, E., Solomon, Y., Dornan, T. and Stalmeijer, R. (2015) ''You become a man in a man's world': is there discursive space for women in surgery?', *Medical Education*, 49(12), 1207-1218, available: http://dx.doi.org/10.1111/medu.12818.

Hillman, N. (2014) *A guide to the removal of student number controls*: Higher Education Policy Institute, available: http://www.hepi.ac.uk/category/publications/page/4/ [accessed, available: http://www.hepi.ac.uk/wp-content/uploads/2014/09/Clean-copy-of-SNC-paper.pdf [accessed 08 July 2017].

Hoare, A. and Johnston, R. (2011) 'Widening participation through admissions policy – a British case study of school and university performance', *Studies in Higher Education*, 36(1), 21-41, available: http://dx.doi.org/10.1080/03075070903414297.

Hoare, A.M., Rosanna. (2011) *The impact of the Sutton Trust's Summer Schools on subsequent higher education participation*: Sutton Trust, available: https://www.suttontrust.com/research-paper/impact-sutton-trusts-summer-schools-subsequent-higher-education-participation-report-sutton-trust/ [accessed 08 October 2018].

Hoffman, S.J., Tierney, J.D. and Robertson, C.L. (2017) 'Counter-narratives of coping and becoming: Karen refugee women's inside/outside figured worlds', *Gender Place and Culture*, 24(9), 1346-1364, available: http://dx.doi.org/10.1080/0966369x.2017.1379473.

Holland, D., Lachicotte, W., Skinner, D. and Cain, C. (1998) *Identity and Agency in Cultural Worlds*, Cambridge: Harvard University Press.

Holton, M. and Riley, M. (2013) 'Student Geographies: Exploring the Diverse Geographies of Students and Higher Education', *Geography Compass*, 7(1), 61-74, available: http://dx.doi.org/10.1111/gec3.12013.

Hutton, W.c.L., Peter., Machin, S., Purves, L. and Dodge, T. (2013) *Analysis of UCAS acceptances for 2012/2013 admissions*: Independent Commission on Fees, available: http://www.independentcommissionfees.org.uk/wordpress/wp-content/uploads/2013/04/Independent-Commission-on-Fees-April-2013-Report.pdf [accessed.

Hyett, N., Kenny, A. and Dickson-Swift, V. (2014) 'Methodology or method? A critical review of qualitative case study reports', *International journal of qualitative studies on health and well-being*, 9, 23606-23606, available: http://dx.doi.org/10.3402/qhw.v9.23606.

Ilie, S. and Rose, P. (2016) 'Is equal access to higher education in South Asia and sub-Saharan Africa achievable by 2030?', *Higher Education*, 72(4), 435-455, available: http://dx.doi.org/10.1007/s10734-016-0039-3.

Independent Review of Higher Education Funding and Student Finance (2010) *Securing a Sustainable Future for Higher Education:An Independent Review of Higher Education Funding and Student Finance (Browne Report)*, available: http://www.bis.gov.uk/assets/biscore/corporate/docs/s/10-1208-securing-sustainable-higher-education-browne-report.pdf [accessed 5 September 2012].

Independent Reviewer of Social Mobility and Child Poverty (2012) *University Challenge:How Higher Education Can Advance Social Mobility*, London: HMSO, available: http://www.cabinetoffice.gov.uk/sites/default/files/resources/Higher-Education.pdf [accessed 23 October 2012].

Jackson, L.H. and Price, C. (2019) 'Illuminating constellations of peer mentoring: The case of Music programmes in Higher Education', *Innovations in Education and Teaching International*, 56(1), 99-109, available: http://dx.doi.org/10.1080/14703297.2017.1417887.

Jackson, P.A. and Seiler, G. (2013) 'Science identity trajectories of latecomers to science in college', *Journal of Research in Science Teaching*, 50(7), 826-857, available: http://dx.doi.org/10.1002/tea.21088.

Jacobi, M. (1991) 'Mentoring and Undergraduate Academic Success: A Literature Review', *Review of Educational Research*, 61(4), 505-532, available: http://dx.doi.org/10.3102/00346543061004505.

Jones, R. (2008) *Widening Participation: A synthesis of research*, available: http://www.heacademy.ac.uk/assets/EvidenceNet/Syntheses/wp_new_to_wp_synthesis.pdf [accessed 8 November 2012].

Jones, S. (2012) *The Personal Statement: A fair way to assess university applicants?*, available: Available from http://www.suttontrust.com/our-work/research/item/the-personal-statement-a-fair-way-to-assess-applicants/ [accessed 12 August 2013].

Jubb, E. (2015) 'Uncapping student numbers -" what it means this year', 10 August 2015, available: http://www.universitiesuk.ac.uk/blog/Pages/uncapping-student-numbers-what-it-means-this-year.aspx [accessed 09 July 2017].

Kaehne, A., Maden, M., Thomas, L., Brown, J. and Roe, B. (2014) *Literature Review on approaches and impact of interventions to facilitate Widening Participation in Healthcare Programmes*, Manchester: Health Education England, available: http://repository.edgehill.ac.uk/6200/1/WPlitrev280514Submitted.pdf [accessed, available: http://nw.hee.nhs.uk/files/2014/06/WPlitrev280514Submitted.pdf [accessed 18 November 2015].

Keane, E. (2015) 'Considering the practical implementation of constructivist grounded theory in a study of widening participation in Irish higher education', *International Journal of Social Research Methodology*, 18(4), 415-431, available: http://dx.doi.org/10.1080/13645579.2014.923622.

Kilpatrick, S., Katersky Barnes, R., Heath, J., Lovat, A., Kong, W.-C., Flittner, N. and Avitaia, S. (2019) 'Disruptions and Bridges in Rural Australia: Higher Education Aspiration to Expectation of Participation', *Higher Education Research and Development*, 38(3), 550-564, available: http://dx.doi.org/http://dx.doi.org/10.1080/07294360.2018.1556619.

Kram, K.E. (1983) 'Phases of the Mentor Relationship', *Academy of Management Journal*, 26(4), 608-625.

Lamont, E., Flack, J. and Wilkin, A. (2011) *An Evaluation of the Research for Excellence Programme: Cohort One*, Slough: National Foundation for Educational Research (NFER), available: http://www.nfer.ac.uk/nfer/publications/RFE01/RFE01.pdf [accessed 18 April 2013].

Lara, G.P. and Franquiz, M.E. (2015) 'Latino Bilingual Teachers: Negotiating the Figured World of Masculinity', *Bilingual Research Journal*, 38(2), 207-227, available: http://dx.doi.org/10.1080/15235882.2015.1066720.

Larkins, S., Michielsen, K., Iputo, J., Elsanousi, S., Mammen, M., Graves, L., Willems, S., Cristobal, F.L., Samson, R., Ellaway, R., Ross, S., Johnston, K., Derese, A. and Neusy, A.-J. (2015) 'Impact of selection strategies on representation of underserved populations and intention to practise: international findings', *Medical Education*, 49(1), 60-72, available: http://dx.doi.org/10.1111/medu.12518.

Legard, R., Keegan, J. and Ward, K. (2003) 'In-depth Interviews' in Ritchie, J. and Lewis, J., eds., *Qualitative Research Practice*, London: Sage, 138-169.

Lewis, J. (2003) 'Design issues' in Ritchie, J. and Lewis, J., eds., *Qualitative Research Practice*, London: Sage, 47-76.

Lewis, P., Vasagar, J., Williams, R. and Taylor, M. (2010) 'Student protest over fees turns violent', *The Guardian [online]*, (10 November 2010), available: http://www.guardian.co.uk/education/2010/nov/10/student-protest-fees-violent/print [accessed 19 April 2013].

Lincoln, Y.S. (1995) 'Emerging criteria for quality in qualitative and interpretive research', *Qualitative inquiry*, 1(3), 275-289.

Lincoln, Y.S. and Guba, E.G. (1985) *Naturalistic inquiry*, Newbury Park, Calif: Sage.

Lounasmeri, L. (2018) 'The emergence of PR consultants as part of the Finnish political communication elite', *Journal of Contemporary European Studies*, 26(4), 377-391, available: http://dx.doi.org/10.1080/14782804.2018.1436530.

Loveday, V. (2015) 'Working-class participation, middle-class aspiration? Value, upward mobility and symbolic indebtedness in higher education', *The Sociological Review*, 63(3), 570-588, available: http://dx.doi.org/10.1111/1467-954X.12167.

Luttrell, W. and Parker, C. (2001) 'High school students' literacy practices and identities, and the figured world of school', *Journal of Research in Reading*, 24(3), 235-247, available: http://www.reading.ccsu.edu/demos/Courses/RDG%20502%20Jamaica%20Winter%202008/Articles/Literacy%20in%20High%20School.pdf [accessed 11 August 2014].

Macfarlane, B. (2010) 'Values and virtues in qualitative research' in *New Approaches to qualitative research* Routledge, 35-43.

Mathers, J. and Parry, J. (2009) 'Why are there so few working-class applicants to medical schools? Learning from', *Med Educ*, 43(3), 219-28, available: http://dx.doi.org/10.1111/j.1365-2923.2008.03274.x.

McCaig (2016) 'The retreat from widening participation? The National Scholarship Programme and new access agreements in English higher education', *Studies in higher education (Dorchester-on-Thames)*, 41(2), 215-230.

McCaig, C. (2010) 'Access agreements, widening participation and market positionality: enabling student choice?' in Molesworth, M. S., Richard. Nixon, Elizabeth., ed., *The marketisation of higher education and the student as consumer.* Routledge, 129-142.

McCowan, T. (2016) 'Three dimensions of equity of access to higher education', *Compare: A Journal of Comparative and International Education*, 46(4), 645-665, available: http://dx.doi.org/10.1080/03057925.2015.1043237.

McHarg, J., Mattick, K. and Knight, L.V. (2007) 'Why people apply to medical school: implications for widening participation activities', *Medical Education*, 41(8), 815-821, available: http://dx.doi.org/10.1111/j.1365-2923.2007.02798.x [accessed 20 June 2014].

McKnight, A., Glennerster, H. and Lupton, R. (2005) 'Education, education, education...: an assessment of Labour's success in tackling education inequalities' in Hills, J. S., Kitty, ed., *A More Equal Society? New Labour, Poverty, Inequality and Exclusion*, Bristol: The Policy Press, 47-68.

McManus, I.C., Dewberry, C., Nicholson, S. and Dowell, J. (2012) *The UKCAT-12 Study: Technical Report*, Nottingham, UK: UKCAT Consortium.

Medical Schools Council (2014) *Selecting for Excellence Final Report*, London: Medical Schools Council, available: http://www.medschools.ac.uk/SiteCollectionDocuments/Selecting-for-Excellence-Final-Report.pdf [accessed 09 February 2015].

Mentor Network (2014) *The mentoring relationship - four phases of the mentoring process*, available: http://www.mentornetwork.net/TheMentoringCycle/Progression/FourPhasesoftheMentoringProcess/tabid/77/Default.aspx [accessed 7 July 2014].

Merriam, S.B. and Tisdell, E.J. (2015) *Qualitative research : a guide to design and implementation*, Fourth edition. ed., San Francisco, CA : Jossey-Bass.

Mewes, J.S., Elliot, M.L. and Lee, K. (2017) 'Cutting through the layers: Alternating perspectives and co-laborative analytic approaches to understanding occupation and its objects', *Journal of Occupational Science*, 24(4), 482-493, available: http://dx.doi.org/10.1080/14427591.2017.1373374.

Milburn, A. (2012) *Fair Access to Professional Careers. A progress report by the Independent Reviewer on Social Mobility and Child Poverty*, London, available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61090/IR_FairAccess_acc2.pdf [accessed 09 February 2015].

Milburn, A. and Shephard, G. (2013) *Higher Education: The Fair Access Challenge*, London, available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/206994/FINAL_Higher_Education_-_The_Fair_Access_Challenge.pdf [accessed, available: https://www.gov.uk/government/publications/higher-education-the-fair-access-challenge [accessed 18 June 2013.

18 June 2013].

Mocca, E., Rojon, C. and Hernández, J. (2019) 'Great Expectations? A Systematic Review of the Relationship Between the School-to-Higher Education Transition and Social Mobility', *Sociological Spectrum*, 39(4), 264-280, available: http://dx.doi.org/10.1080/02732173.2019.1669235.

Moher, D., Liberati, A., Tetzlaff, J. and Altman, D.G. (2009) 'Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement', *BMJ*, 339, b2535, available: http://dx.doi.org/10.1136/bmj.b2535.

Moineau, G. (2015) 'Our social accountability: when will we walk the talk?', *Medical Education*, 49(1), 9-11, available: http://dx.doi.org/10.1111/medu.12629.

Molesworth, M., Nixon, E. and Scullion, R. (2009) 'Having, being and higher education: the marketisation of the university and the transformation of the student into consumer', *Teaching in Higher Education*, 14(3), 277-287, available: http://dx.doi.org/10.1080/13562510902898841.

Montacute, R. (2018) *Access to Advantage*: The Sutton Trust, available: https://www.suttontrust.com/research-paper/access-to-advantage-university-admissions/ [accessed 14 December 2018].

Moore, J., Sanders, J. and Higham, L. (2013) *Literature review of research into widening participation to higher education. Report to HEFCE and OFFA by ARC Network*, available: http://www.hefce.ac.uk/media/hefce/content/pubs/indirreports/2013/literaturereviewofwptohe/Literature%20review%20of%20research%20into%20WP%20to%20HE.pdf [accessed 22 January 2014].

Moore, J.M.-Z., A. Wiggans, J. (2013) *Contextualised Admissions: Examining the Evidence.*, Cheltenham: Supporting Professionalism in Admissions, available: https://www.spa.ac.uk/resources/spas-work-contextualised-admissions?section=126#CA%20Report%202013 [accessed, available: https://www.spa.ac.uk/sites/default/files/Research-CA-Report-2013-full_0.pdf [accessed 05 June 2018].

Moote, J. and Archer, L. (2017) 'Failing to deliver? Exploring the current status of career education provision in England', *Research Papers in Education*, 1-29, available: http://dx.doi.org/10.1080/02671522.2016.1271005.

Morgan, B. (2008) 'Identity Presentation: The Construction of Identity in Asynchronous Discussion', *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research; Vol 9, No 3 (2008): Visual Methods*, available: http://dx.doi.org/10.17169/fqs-9.3.1006.

Morgan, J. (2015) 'Aimhigher revisited? New national outreach project launched', *Times Higher Education*, (08 January 2015), available: http://www.timeshighereducation.co.uk/news/aimhigher-revisited-new-national-outreach-project-launched/2017856.article [accessed 09 January 2015].

Mountford-Zimdars, A., Sanders, J., Moore, J., Sabri, D., Jones, S. and Higham, L. (2016) 'What can universities do to support all their students to progress successfully throughout their time at university?', *Perspectives: Policy and Practice in Higher Education*, 1-10, available: http://dx.doi.org/10.1080/13603108.2016.1203368.

Naraian, S. (2010) 'General, Special "and" ... Inclusive: Refiguring Professional Identities in a Collaboratively Taught Classroom', *Teaching and Teacher Education: An International Journal of Research and Studies*, 26(8), 1677-1686.

NCIHE (The Dearing Committee) (1997) *Higher Education in the Learning Society. The Dearing Report*, available: http://www.leeds.ac.uk/educol/ncihe/ [accessed 7 November 2012].

New Labour Party (1997) *Labour Party Manifesto (online)*, available: http://www.politicsresources.net/area/uk/man/lab97.htm [accessed 29 January 2013].

Nicholson, S. and Cleland, J.A. (2017) '"It's Making Contacts": Notions of Social Capital and Implications for Widening Access to Medical Education', *Advances in Health Sciences Education*, 22(2), 477-490, available: http://dx.doi.org/http://dx.doi.org/10.1007/s10459-016-9735-0.

Nir, E. (2018) 'Approaching the bench: accessing elites on the judiciary for qualitative interviews', *International Journal of Social Research Methodology*, 21(1), 77-89, available: http://dx.doi.org/10.1080/13645579.2017.1324669.

Noble, J. and Davies, P. (2009) 'Cultural capital as an explanation of variation in participation in higher education', *British Journal of Sociology of Education*, 30(5), 591-605, available: http://dx.doi.org/10.1080/01425690903101098.

OFFA *OFFA - home page*, available: http://www.offa.org.uk/ [accessed 15 May 2013].

OFFA (2017) *Glossary - OFFA*, available: https://www.offa.org.uk/glossary/ [accessed 26 March 2017].

OFFA/HEFCE (2013) *Access agreement and widening participation strategic assessment 2011-12 and National Scholarship Programme 2012-13 (in-year) monitoring outcomes*, available: http://www.offa.org.uk/wp-content/uploads/2013/06/HEFCEOFFA-Joint-Monitoring-Outcomes-Report.pdf [accessed 07 June 2013].

OfS (2018) *A new approach to regulating access and participation in English higher education-Consultation outcomes*: Office for Students, available: https://www.officeforstudents.org.uk/media/546d1a52-5ba7-4d70-8ce7-c7a936aa3997/ofs2018_53.pdf [accessed 14 December 2018].

Olson, R.E. (2015) 'Exploring identity in the 'figured worlds' of cancer care-giving and marriage in Australia', *Health & Social Care in the Community*, 23(2), 171-179, available: http://dx.doi.org/10.1111/hsc.12132.

Olson, R.E., Klupp, N. and Astell-Burt, T. (2016) 'Reimagining health professional socialisation: an interactionist study of interprofessional education', *Health Sociology Review*, 25(1), 92-107, available: http://dx.doi.org/10.1080/14461242.2015.1101702.

Panel on Fair Access to the Professions (2009) *Unleashing Aspirations: The Final Report of the Panel on the Fair Access to the Professions*: Cabinet Office.

Pennell, H. and West, A. (2005) 'The Impact of Increased Fees on Participation in Higher Education in England', *Higher Education Quarterly*, 59(2), 127-137, available: http://dx.doi.org/10.1111/j.1468-2273.2005.00286.x.

Powell, S.R. (2016) 'The Self-Authoring of a Music Educator: A Journey Through Figured Worlds', *Bulletin of the Council for Research in Music Education*, (210), 25-41.

Putnam, R.D. (2000) *Bowling Alone : The Collapse and Revival of American Community*, New York: Simon & Schuster.

Qasim, S. and Williams, J. (2012) 'A critical appraisal of Holland et al.'s (1998) appropriation of Bourdieu', in *European Conference of Educational Research (ECER).* Cadiz, Spain., 2012.

Quinlan, A. and Curtin, A. (2017) 'Contorting Identities: Figuring Literacy and Identity in Adolescent Worlds', *Irish Educational Studies*, 36(4), 457-470.

Rahm, J. and Moore, J.C. (2016) 'A case study of long-term engagement and identity-in-practice: Insights into the STEM pathways of four underrepresented youths', *Journal of Research in Science Teaching*, 53(5), 768-801, available: http://dx.doi.org/10.1002/tea.21268.

Rainford, J. (2016) 'Targeting of widening participation measures by elite institutions: widening access or simply aiding recruitment?', *Perspectives: Policy and Practice in Higher Education*, 1-6, available: http://dx.doi.org/10.1080/13603108.2016.1148645.

Raven, N. (2015) 'The impact of mentoring reconsidered: an exploration of the benefits for student mentors', *Research in Post-Compulsory Education*, 20(3), 280-295, available: http://dx.doi.org/10.1080/13596748.2015.1063265.

Reay, D., Crozier, G. and Clayton, J. (2009) ''Strangers in Paradise'?: Working-class Students in Elite Universities', *Sociology*, 43(6), 1103-1121, available: http://dx.doi.org/10.1177/0038038509345700.

Richardson, H. (2013) 'Top universities 'have become less representative'', *BBC News: Education & Family [Online]*, (17 June 2013), available: http://www.bbc.co.uk/news/education-22912609 [accessed 17 June 2013].

Ritchie, J. (2003) 'The applications of qualitative methods to social research' in Ritchie, J. and Lewis, J., eds., *Qualitative research practice: A guide for social science students and researchers*, 1st edition ed., London: Sage, 24-46.

Robb, N., Dunkley, L., Boynton, P. and Greenhalgh, T. (2007) 'Looking for a better future: Identity construction in socio-economically deprived 16-year olds considering a career in medicine', *Social Science & Medicine*, 65(4), 738-754, available: http://dx.doi.org/http://dx.doi.org/10.1016/j.socscimed.2007.03.011.

Robbins, L. (1963) *Higher Education: Report of the Committee appointed by the Prime Minister under the Chairmanship of Lord Robbins*, London: HMSO, available: http://www.educationengland.org.uk/documents/robbins/robbins19.html [accessed 15 November 2012].

Roberts, A. and Weston, K. (2011) *Making a difference through mentoring. An evaluation of the impact of mentoring practices undertaken through the Aimhigher programme in Hertfordshire schools*, available: http://www.heacademy.ac.uk/resources/detail/aim_higher/Making_a_difference_through_mentoring [accessed 20 June 2014].

Robson, C. (2011) *Real world research: a resource for users of social research methods in applied settings*, Chichester, West Sussex: Wiley.

Rubin, B. (2007) 'Learner Identity Amid Figured Worlds: Constructing (In)competence at an Urban High School', *The Urban Review*, 39(2), 217-249, available: http://dx.doi.org/10.1007/s11256-007-0044-z.

Russell Group Universities (2013) *Russell Group: Our Universities*, available: http://www.russellgroup.ac.uk/our-universities.aspx [accessed 07 August 2013].

Sanders, M., Burgess, S., Chande, R., Dilnot, C., Kozman, E. and Macmillan, L. (2018) 'Role models, mentoring and university applications-evidence from a crossover randomised controlled trial in the United Kingdom', *Widening Participation and Lifelong Learning*, 20(4), 57-80.

Sasia, A.W., Geoff. Tough, Sarah. (2008) *Productive Partnerships? An Examination of Schools' Links with Higher Education*, London: The Sutton Trust, available: https://www.suttontrust.com/research-paper/productive-partnerships-examination-schools-links-higher-education/ [accessed 28 July 2019].

Scanlon, L. (2009) 'Metaphors and mentoring: constructing a mentor typology from the perspective of student mentors', *International Journal of Evidence Based Coaching & Mentoring*, 7(2), 71-81.

Scott, P. (2012) 'It's 20 years since polytechnics became universities – and there's no going back', *Guardian*, (3 September 2012), available: http://www.guardian.co.uk/education/2012/sep/03/polytechnics-became-universities-1992-differentiation [accessed 24 Jan 2013].

Seale, C. (1999) 'Quality in Qualitative Research', *Qualitative Inquiry*, 5(4), 465-478, available: http://dx.doi.org/10.1177/107780049900500402.

Shiner, M. and Noden, P. (2015) ''Why are you applying there?': 'race', class and the construction of higher education 'choice' in the United Kingdom', *British Journal of Sociology of Education*, 36(8), 1170-1191, available: http://dx.doi.org/10.1080/01425692.2014.902299.

Silverman, D. (2005) *Doing Qualitative Research : A Practical Handbook*, 2nd ed., London: Sage.

Single, P.B. and Single, R.M. (2005) 'E-mentoring for social equity: review of research to inform program development', *Mentoring & Tutoring: Partnership in Learning*, 13(2), 301-320, available: http://dx.doi.org/10.1080/13611260500107481.

Skene, J., Pollard, L. and House, H. (2016) 'Aspire UWA : A case study of widening access in Higher Education', *Student Success*, 7(2), 11-20, available: http://dx.doi.org/http://dx.doi.org/10.5204/ssj.v7i2.337.

Skinner, D., Valsiner, J. and Holland, D. (2001) 'Discerning the Dialogical Self: A Theoretical and Methodological Examination of a Nepali Adolescent's Narrative', *Forum : Qualitative Social Research*, 2(3).

Smart, G. and Thompson, R. (2017) '"Someone Just Like Me:" Narrative, Figured World, and Uptake in Therapeutic Books for Youths With Mental Health Disorders', *Written Communication*, 34(1), 5-29, available: http://dx.doi.org/http://dx.doi.org/10.1177/0741088316681997.

Smith, S., Alexander, A., Dubb, S., Murphy, K. and Laycock, J. (2013) 'Opening doors and minds: a path for widening access', *The Clinical Teacher*, 10(2), 124-128, available: http://dx.doi.org/10.1111/j.1743-498X.2012.00616.x.

Smyth, E. and Banks, J. (2012) ''There was never really any question of anything else': young people's agency, institutional habitus and the transition to higher education', *British Journal of Sociology of Education*, 33(2), 263-281, available: http://dx.doi.org/10.1080/01425692.2012.632867.

Snape, D. and Spencer, L. (2003) 'The Foundations of Qualitative Research' in Ritchie, J. and Lewis, J., eds., *Qualitative Research Practice*, London: Sage, 1-23.

Social Mobility and Child Poverty Commission (2013) *Higher Education: The Fair Access Challenge*, London, available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/206994/FINAL_Higher_Education_-_The_Fair_Access_Challenge.pdf [accessed, available: https://www.gov.uk/government/publications/higher-education-the-fair-access-challenge [accessed.

Souleles, D. (2018) 'How to Study People Who Do Not Want to be Studied: Practical Reflections on Studying Up', *PoLAR: Political and Legal Anthropology Review*, 41(S1), 51-68, available: http://dx.doi.org/10.1111/plar.12253.

Southgate, E., Kelly, B.J. and Symonds, I.M. (2015) 'Disadvantage and the 'capacity to aspire' to medical school', *Medical Education*, 49(1), 73-83, available: http://dx.doi.org/10.1111/medu.12540.

SPA and NETT (2013) *HEFCE Student Number Controls (SNC) and admissions good practice*, available: https://www.spa.ac.uk/resources/hefce-student-number-controls [accessed, available: https://www.spa.ac.uk/sites/default/files/Briefing-NETT-SNC-Guide-2013.pdf [accessed 24 June 2018].

Stacey, D.G. and Kurunathan, T.M. (2015) 'Noncognitive Indicators as Critical Predictors of Students' Performance in Dental School', *Journal of Dental Education*, 79(12), 1402-1410.

Staiger, J. (2013) '"Because I Am a Woman": Thinking Identity and Agency for Historiography', *Film History*, 25(1-2), 205-214.

Stake, R.E. (1995) *The art of case study research*, Thousand Oaks, Calif;London;: Sage.

Stake, R.E. (2008) 'Qualitative Case Studies' in Denzin, N. K. and Lincoln, Y. S., eds., *Strategies of Qualitative Inquiry*, 3rd ed., Los Angeles: Sage Publications Inc., 119-149.

Stanley, J. and Goodlad, S. (2010) *Literature Review to Support the 'Learner Progression Matrix Development Project: The Progression [W]hole*, Warwick: Centre for Education and Industry, University of Warwick, available: https://www.heacademy.ac.uk/sites/default/files/ahcw_progression_matrix_lit_rev.pdf [accessed 15 November 2015].

Stegers-Jager, K.M., Steyerberg, E.W., Lucieer, S.M. and Themmen, A.P.N. (2015) 'Ethnic and social disparities in performance on medical school selection criteria', *Medical Education*, 49(1), 124-133, available: http://dx.doi.org/10.1111/medu.12536.

Steven, K., Dowell, J., Jackson, C. and Guthrie, B. (2016) 'Fair access to medicine? Retrospective analysis of UK medical schools application data 2009-2012 using three measures of socioeconomic status', *BMC Medical Education*, 16(1), 11, available: http://dx.doi.org/10.1186/s12909-016-0536-1.

Stewart, K. (2009) 'Labour's Record on Inequality and the New Opportunities White Paper', *The Political Quarterly*, 80(3), 427-433, available: http://dx.doi.org/10.1111/j.1467-923X.2009.02013.x.

Storan, J. (2005) 'From here to diversity: reflections on widening participation in Higher Education', in *CUVP Changing Landscapes Conference*, University of Wales, Swansea.

Storey, P. (2005) *Mentoring and AimHigher/Widening Participation: A literature review*, available: http://scottishmentoringnetwork.co.uk/assets/downloads/resources/higher-education-mentoring-literature-review.pdf [accessed 20 June 2014].

Stringer, N., Chan, M., Bimpeh, Y. and Chan, P. (2016) 'Preadmission schooling context helps to predict examination performance throughout medical school', *Advances in Health Sciences Education*, 1-15, available: http://dx.doi.org/10.1007/s10459-016-9714-5.

Stubbing, E., Helmich, E. and Cleland, J. (2018) 'Authoring the identity of learner before doctor in the figured world of medical school', *Perspect Med Educ*, 7(1), 40-46, available: http://dx.doi.org/10.1007/s40037-017-0399-0.

Sullivan, A. (2002) 'Bourdieu and education: How useful is Bourdieu's theory for researchers?', *Netherlands Journal of Social Sciences*, 38(2), 144-166.

Sutton Trust (Internal Study) (2010) *The Reach for Excellence Programme: a summary and discussion of findings from the first cohort of students*: Sutton Trust, available: http://www.suttontrust.com/research/rfesummary2010/ [accessed 19 April 2013].

Taylor, C. and McCaig, C. (2014) *Evaluating the impact of number controls, choice and competition: an analysis of the student profile and the student learning environment in the new higher education landscape*: Higher Education Academy, available: https://www.heacademy.ac.uk/knowledge-hub/evaluating-impact-number-controls-choice-and-competition-analysis-student-profile-and [accessed 09 July 2017].

Taylor, Z.W. (2018) 'Talking to the mentees: exploring mentee dispositions prior to the mentoring relationship', *International Journal of Mentoring and Coaching in Education*, 7(4), 296-311, available: http://dx.doi.org/10.1108/IJMCE-04-2018-0019.

Terosky, A.L. and Gonzales, L.D. (2016) 'Re-Envisioned Contributions: Experiences of Faculty Employed at Institutional Types That Differ from Their Original Aspirations', *Review of Higher Education*, 39(2), 241-268.

The Sutton Trust (2004) *The Missing 3000. State school students under-represented at leading universities*, available: *www.suttontrust.com/our-work/research/download/84/* [accessed 07 August 2013].

Tholen, G., Relly, S.J., Warhurst, C. and Commander, J. (2016) 'Higher education, graduate skills and the skills of graduates: the case of graduates as residential sales estate agents', *British Educational Research Journal*, 42(3), 508-523, available: http://dx.doi.org/10.1002/berj.3222.

Thomas, L. (2001) 'Power, assumptions and prescriptions: a critique of widening participation policy-making', *Higher Education Policy*, 14(4), 361-376, available: http://dx.doi.org/http://dx.doi.org/10.1016/S0952-8733(01)00026-5.

Thomas, L. (2011) 'Do Pre-entry Interventions such as 'Aimhigher' Impact on Student Retention and Success? A Review of the Literature', *Higher Education Quarterly*, 65(3), 230-250, available: http://dx.doi.org/10.1111/j.1468-2273.2010.00481.x.

Tomlinson, M. (2017) 'Student perceptions of themselves as 'consumers' of higher education', *British Journal of Sociology of Education*, 38(4), 450-467, available: http://dx.doi.org/10.1080/01425692.2015.1113856.

Torgerson, C., Gascoine, L., Heaps, C., Menzies, V. and Younger, K. (2014) *Higher Education access: Evidence of effectiveness of university access strategies and approaches*, London, available: https://www.suttontrust.com/wp-content/uploads/2015/12/Higher-Education-Access-Report-1.pdf [accessed 29 June 2018].

Turner, R. and Nicholson, S. (2011) 'Reasons selectors give for accepting and rejecting medical applicants before interview', *Medical Education*, 45(3), 298-307, available: http://dx.doi.org/10.1111/j.1365-2923.2010.03874.x.

Universities UK (2009) *Higher Education Engagement with Schools and Colleges: Partnership Development*, London: Universities UK, available:

http://www.universitiesuk.ac.uk/highereducation/Documents/2009/EngagementSchoolsColleges.pdf [accessed 18 April 2013].

Urrieta, L., Jr. (2007) 'Figured Worlds and Education: An Introduction to the Special Issue', *The Urban Review*, 39(2), 107-116, available: http://dx.doi.org/10.1007/s11256-007-0051-0.

Usher, A.B., Robert. (2018) *Targeted Tuition Fees: Is means-testing the answer?*: HEPI, available: https://www.hepi.ac.uk/2018/09/20/6489/ [accessed, available: https://www.hepi.ac.uk/wp-content/uploads/2018/09/HEPI-Targeted-tuition-fees-Is-means-testing-the-answer-Report-112.pdf [accessed 27 September 2018].

Vagan, A. (2011) 'Towards a Sociocultural Perspective on Identity Formation in Education', *Mind, Culture, and Activity*, 18(1), 43-57.

Valle, I. and Weiss, E. (2010) 'Participation in the figured world of graffiti', *Teaching and Teacher Education*, 26(1), 128-135, available: http://dx.doi.org/http://dx.doi.org/10.1016/j.tate.2009.05.006.

van Lankveld, T., Schoonenboom, J., Kusurkar, R.A., Volman, M., Beishuizen, J. and Croiset, G. (2017) 'Integrating the teaching role into one's identity: a qualitative study of beginning undergraduate medical teachers', *Advances in Health Sciences Education*, 22(3), 601-622, available: http://dx.doi.org/10.1007/s10459-016-9694-5.

Van Puyvelde, D. (2018) 'Qualitative Research Interviews and the Study of National Security Intelligence', *International Studies Perspectives*, 19(4), 375-391, available: http://dx.doi.org/10.1093/isp/eky001.

Vera, D. and Crossan, M. (2005) 'Improvisation and Innovative Performance in Teams', *Organization Science*, 16(3), 203-224, available: http://dx.doi.org/10.1287/orsc.1050.0126.

Wakeling, P. and Savage, M. (2015) 'Entry to elite positions and the stratification of higher education in Britain', *The Sociological Review*, 63(2), 290-320, available: http://dx.doi.org/10.1111/1467-954X.12284.

Walford, G. (1988) 'The Privatisation of British Higher Education', *European Journal of Education*, 23(1/2), 47-64, available: http://dx.doi.org/10.2307/1502964.

Waller, R., Harrison, N. and Last, K. (2015) *Building a culture of participation: interviews with the former directors of the national Aimhigher programme.*, Bristol: University of the West of England, available: http://eprints.uwe.ac.uk/27225/ [accessed 08 February 2016].

Waller, R., Holford, J., Jarvis, P., Milana, M. and Webb, S. (2014) 'Widening participation, social mobility and the role of universities in a globalized world', *International Journal of Lifelong Education*, 33(6), 701-704, available: http://dx.doi.org/10.1080/02601370.2014.972082.

Watson, J. (2005) 'Supporting success in diverse student populations', *British Journal of Occupational Therapy*, 68(1), 34-38, available: http://dx.doi.org/Watson, J. (2005) Supporting success in diverse student populations. British Journal of Occupational Therapy, 68 (1), 34-38.

Webber, L. (2014) 'Accessing HE for Non-Traditional Students: "Outside of My Position"', *Research in Post-Compulsory Education*, 19(1), 91-106, available: http://dx.doi.org/http://dx.doi.org/10.1080/13596748.2014.872936.

Weick, K.E. (1998) 'Introductory Essay—Improvisation as a Mindset for Organizational Analysis', *Organization Science*, 9(5), 543-555, available: http://dx.doi.org/10.1287/orsc.9.5.543.

Whitty, G., Hayton, A. and Tang, S. (2015) 'Who You Know, What You Know and Knowing the Ropes: A Review of Evidence about Access to Higher Education Institutions in England', *Review of Education*, 3(1), 27-67, available: http://dx.doi.org/http://dx.doi.org/10.1002/rev3.3038.

Widening Participation Committee (1997) *Learning Works - Widening Participation in Further Education. The Kennedy Report*, London: Further Education Funding Council, available: http://dera.ioe.ac.uk/15073/2/Learning%20works%20-%20widening%20participation%20in%20further%20education%20(Kennedy%20report).pdf [accessed 16 November 2012].

Wides, C.D., Brody, H.A., Alexander, C.J., Gansky, S.A. and Mertz, E.A. (2013) 'Long-Term Outcomes of a Dental Postbaccalaureate Program: Increasing Dental Student Diversity and Oral Health Care Access', *Journal of Dental Education*, 77(5), 537-547.

Wiggins, J.L. and Monobe, G. (2017) 'Positioning Self in “figured worlds”: Using Poetic Inquiry to Theorize Transnational Experiences in Education', *The Urban Review*, 49(1), 153-168, available: http://dx.doi.org/10.1007/s11256-016-0386-5.

Wilks, J. and Wilson, K. (2012) 'Going on to uni? Access and participation in university for students from backgrounds of disadvantage', *Journal of Higher Education Policy and Management*, 34(1), 79-90, available: http://dx.doi.org/10.1080/1360080X.2012.642335.

Williams, M. (2002) 'Generalisation in interpretive research' in May, T., ed., *Qualitative research in action*, London: SAGE, 117-132.

Wilson, A.T. and Grigorian, S. (2019) 'The near-peer mathematical mentoring cycle: studying the impact of outreach on high school students’ attitudes toward mathematics', *International Journal of Mathematical Education in Science and Technology*, 50(1), 46-64, available: http://dx.doi.org/10.1080/0020739X.2018.1467508.

Wilson, W. (1997) *Student Grants, Loans and Tuition Fees*, London: House of Commons Library, available: www.parliament.uk/briefing-**papers**/RP97-119.pdf [accessed 20 February 2013].

Wouters, A., Bakker, A.H., van Wijk, I.J., Croiset, G. and Kusurkar, R.A. (2014) 'A qualitative analysis of statements on motivation of applicants for medical school', *BMC Med Educ*, 14, 200, available: [accessed 26 November 2015].

Wright, S. (2015) 'Medical school personal statements: a measure of motivation or proxy for cultural privilege?', *Advances in Health Sciences Education*, 20(3), 627-643, available: http://dx.doi.org/10.1007/s10459-014-9550-4 [accessed 26 November 2015].

Yin, R.K. (2014) *Case study research : design and methods /Robert K. Yin*, 5th ed. ed., Los Angeles ; London: Los Angeles ; London : SAGE.

Yomtov, D., Plunkett, S.W., Efrat, R. and Marin, A.G. (2015) 'Can Peer Mentors Improve First-Year Experiences of University Students?', *Journal of College Student Retention: Research, Theory & Practice*, 19(1), 25-44, available: http://dx.doi.org/10.1177/1521025115611398.

Younger, K., Gascoine, L., Menzies, V. and Torgerson, C. (2019) 'A systematic review of evidence on the effectiveness of interventions and strategies for widening participation in higher education', *Journal of Further and Higher Education*, 43(6), 742-773, available: http://dx.doi.org/10.1080/0309877X.2017.1404558.

Zimdars, A., Sullivan, A. and Heath, A. (2009) 'Elite Higher Education Admissions in the Arts and Sciences: Is Cultural Capital the Key?', *Sociology*, 43(4), 648-666, available: http://dx.doi.org/10.1177/0038038509105413.

Appendix 1: Glossary of terms

Access Agreement	An annual document created by HEIs as a condition for charging higher fees. This document sets out the level of fees the HEI will charge and how the HEI will promote WP. The document must be approved by OfS (previously OFFA).
Fee cap	The maximum increased fee a university can charge under an Access Agreement.
Increasing participation	Increasing the numbers of individuals in HE.
Magnet School	Public schools in USA which typically focus on specific themes such as STEM subjects and attract children of various socio-economic backgrounds, race or academic achievement levels. Often have high demand and operate on lottery system for admissions.
Recruitment	The process of encouraging young individuals to think about pursuing (and, therefore, applying to) a profession or course.
Russell Group	A self-selected group of 24 selective HEIs in the UK with a shared reputation for excellence in academic achievement and research.
Selection	The processes employed by HEIs to aid the decision of who will be offered a place to study a course.
Selective HEI	An institution (or course in an institution) for which entry requirements as well as demand for places are high.

SNC allocation	The number of students HEIs can recruit, which is regulated by the allocation of government funding for full-time undergraduate places.
Upward Bound	A US based programme that provides support to individuals from disadvantaged backgrounds in college entrance exams.
Widening Access	Interventions that increase the recruitment and admission of individuals traditionally underrepresented in HE, that is*, efforts directed at the HEI's admission process.*
Widening Participation	Interventions that encourage and provide opportunities for traditionally underrepresented individuals to consider HE by removing barriers that might otherwise prevent them from accessing HE, that is, *efforts directed at the individuals.*

Appendix 2: Template CASP checklist form

	Name of paper Author Year		Overall CASP score:	Geographical location:
	Section A: Are the results valid?			
1	Was there a clear statement of the aims of the research? Yes/No/Can't say		Consider •what was the goal of the research •why it was thought important •its relevance	
	Comments			
2	Is a qualitative methodology appropriate?		Consider •If the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants •Is qualitative research the right methodology for addressing the research goal	
	Comments			
	Is it worth continuing?			
3	Was the research design appropriate to address the aims of the research?		Consider • if the researcher has justified the research design (e.g. have they discussed how they decided which method to use)	
	Comments			
4	Was the recruitment strategy appropriate to the aims of the research?		Consider • If the researcher has explained how the participants were selected • If they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study • If there are any discussions around recruitment (e.g. why some people chose not to take part)	
	Comments			
5	Was the data collected in a way that addressed the research issue?		Consider • If the setting for the data collection was justified • If it is clear how data were collected (e.g. focus group, semi-structured interview etc.) • If the researcher has justified the methods chosen • If the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews are conducted, or did they use a topic guide) • If methods were modified during the study. If so, has the researcher explained how and why • If the form of data is clear (e.g. tape recordings, video material, notes etc.) • If the researcher has discussed saturation of data	
	Comments			
6	Has the relationship between researcher and participants been adequately considered?		Consider • If the researcher critically examined their own role, potential bias and influence during (a) formulation of the research questions (b) data collection, including sample recruitment and choice of location • How the researcher responded to events during the study and whether they considered the implications of any changes in the research design	
	Comments			
	Section B: What are the results?			
7	Have ethical issues been taken into consideration?		Consider • If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained • If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study) • If approval has been sought from the ethics committee	
	Comments			
8	Was the data analysis sufficiently rigorous?		Consider • If there is an in-depth description of the analysis process • If thematic analysis is used. If so, is it clear how the categories/themes were derived from the data • Whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process • If sufficient data are presented to support the findings • To what extent contradictory data are taken into account • Whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation	
	Comments			
9	Is there a clear statement of findings?		Consider whether • If the findings are explicit • If there is adequate discussion of the evidence both for and against the researcher's arguments • If the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst) • If the findings are discussed in relation to the original research question	
	Comments			
	Section C: Will the results help locally?			
10	How valuable is the research?		Consider • If the researcher discusses the contribution the study makes to existing knowledge or understanding (e.g. do they consider the findings in relation to current practice or policy, or relevant research-based literature • If they identify new areas where research is necessary • If the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be used	
	Comments			

Appendix 3: Data extraction table for Figured Worlds literature

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Avraamidou L. Stories we live, identities we build: how are elementary teachers' science identities shaped by their lived experiences? 2018	Education Science teacher education	This study examined the development of science teacher identities through a life-history analysis of teachers' experiences in the multiple Figured Worlds they inhabited throughout their life.	Identity and agency	Europe	20
Bal A. Becoming In/competent Learners in the United States: Refugee Students' Academic Identities in the Figured World of Difference 2014	Education Politics Refugee students' education	The authors discuss how refugee students were negatively positioned by those in power in the Figured World of education and how they accepted these positionings	Positioning identity, intersecting Figured Worlds, cultural artefacts used to position individuals by those in power	USA	20
Bennett, Deirdre; Solomon, Yvette; Bergin, Colm; Horgan, Mary; Dornan, Tim Possibility and agency in Figured Worlds: becoming a 'good doctor' 2017	Healthcare professions education Undergraduate medical education	Development of professional identity among medical students within the Figured World of being a medical student and future doctor. The study explores how dominant discourses are taken up and internalised, negotiated or contested by medical students in creating specific identities. Tensions between the dominant discourses of standardised qualities of a doctor and the need to increase diversity of medical applicant intake are discussed	Identity, structural constraints, power and dominant discourses. Cultural resources are alluded to but not explicitly referred to in terms of artefact and there is little exploration of agency and no mention of improvisation	Republic of Ireland	13

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Bomer, Randy Laman, Tasha Positioning in a Primary Writing Workshop: Joint Action in the Discursive Production of Writing Subjects 2004	Education Primary education and literacy practices	Children's positional identities, as they position one another and themselves within the Figured World of a writing workshop, are examined as they engage in conversation with one another.	Cultural artefacts in the form of children's writings, positional identities and improvisation in conversation while making claims to certain identities.	USA	19
Boylan, Mark; Adams, Gill; Coldwell, Mike; Willis, Ben; Demack, Sean Theorising variation in engagement in professional and curriculum development: performativity, capital, systems and purpose 2018	Education Teacher education and CPD	Figured Worlds was used alongside forms of capital and systemic coupling theories to explain teachers' level of engagement with a Mathematics teaching improvement course. The authors use the theory of Figured Worlds to explain how Mathematics departments are more or less aligned with the values of the professional developmental activity.	None of the analytical concepts were used, apart from a basic principle, that is, actors within a Figured World assign more or less salience to other actors and to other activities.	UK	17
Brown C.P., Bay-Borelli D.E., Scott J. Figuring Out How To Be a Teacher in a High-Stakes Context: A Case Study of First-Year Teachers' Conceptual and Practical Development 2015	Education Teacher education	The authors explore the experiences of novice teachers through a Figured Worlds lens, as they negotiate their identities and face the challenges of teaching in high-stakes examination contexts; as they develop salience with certain ways of teaching, which may allow the novice teachers to then explore possibilities for change in these contexts and in return develop successful identities within these worlds.	Identity development, salience with a Figured World, history-in-person	USA	16

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Brown C.P., Feger B.S. Examining the challenges early childhood teacher candidates face in figuring their roles as early educators 2010	Education Teacher education	Preservice teachers bring their history-in-person as they figured their identities and activities in the world of classroom teaching and negotiate conflicts as they arise between their ideas of teaching and the standardised curriculum content.	Identity and history-in-person. There was no reference to other analytical concepts explicitly, although history in person could be considered as an artefact from another Figured World.	USA	16
Carlone H.B., Scott C.M., Lowder C. Becoming (less) scientific: A longitudinal study of students' identity work from elementary to middle school science 2014	Education Primary school	The authors discuss how elementary and middle school pupils were positioned in the Figured Worlds of various types of science classrooms and how they claimed their identity. Identity development by the science teacher is also discussed through the data.	Identity, subject positioning, structural and institutional constraints. Brief mention of claiming voice and perhaps agency.	USA	16
Chang A. Identity Production in Figured Worlds: How Some Multiracial Students Become Racial Atravesados/as 2014	Education Undergraduate education	Figured World perspective to examine the assertion of (one or more) multiracial identities, via "improvisational activity" (p.36), by undergraduate university students, such as choosing cultural markers of race or creating new categories to describe racial identities-but probably represents more of agency in contesting dominant discourses of identities. By repeatedly negotiating racial identities, the students' activities became embedded in their practices.	Identity: positioning and agency. While not explicitly analysed, the author briefly mentions tools available for these activities, in other words, artefacts.	USA	18

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Chang A., Torrez M.A., Ferguson K.N., Sagar A. Figured Worlds and American Dreams: An Exploration of Agency and Identity Among Latinx Undocumented Students 2017	Education Immigration Undergraduate education Immigrant education	The authors explore identity negotiation through positioning, space of authoring and agency amongst undocumented Latin American youth studying in American University, against the structural constraints of financial pressure, dominant discourses of their illegal status and the need to prove themselves.	Identity, space of authoring, agency. The authors mentions improvisational activity, but I think this refers to a form of agency	USA	17
Dornan T, Pearson E, Carson P, Helmich E, Bundy C. Emotions and identity in the figured world of becoming a doctor. 2015	Healthcare professions education Junior doctor training, postgraduate medical education	Figured World approach to explore identity development through emotions, and the recognition of figures within Figured Worlds, which affects the positive or negative emotions of trainee doctors, and thereby helps shape their identities	Identity as a result of what I would call interpersonal interaction and the use of discourses as artefacts, although not explicitly described- to develop identities. Lacks discussion of agency and improvisation which are evident in the data	UK	15
Duncheon, Julia C.; Relles, Stefani R. "A Ditcher and a Scholar": Figuring College-Going Identities in an Urban Magnet High School 2018	WP Education Secondary education	The Figured World of a special school designed to help disadvantaged pupils attain admission to HE is explored for how the pupils are positioned, how they author their identities, what artefacts are employed and what the implications of this are	Identity, subject positioning, artefacts	USA	15
Esbensen, Gertrud Lynge; Hasse, Cathrine Technology in Intersecting Figured Worlds. 2015	Healthcare professions education Nursing education	Student nurses' actions are analysed in the intersecting Figured Worlds of health and technology and their frustrations in dealing with these. I think there is some mention of artefacts.	Identity, artefacts maybe	Denmark	11

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Helmich E., Yeh H.-M., Yeh C.-C., De Vries J., Fu-Chang Tsai D., Dornan T. Emotional Learning and Identity Development in Medicine: A Cross-Cultural Qualitative Study Comparing Taiwanese and Dutch Medical Undergraduates 2017	Healthcare professions education Undergraduate medical education	Emotion and identity development amongst medical students in Netherlands and Taiwan are compared and the research is framed in a Figured Worlds lens. Although there is some description of agency and positioning, there is not much exploration of the use of agency in identity development.	Identity (figured, positional, self-authored), world making, relationship to affect - from the template for analysis in paper.	Netherlands and Taiwan	16
Hill E, Solomon Y, Dornan T, Stalmeijer R. You become a man in a man's world': is there discursive space for women in surgery? 2015	Healthcare professions Medicine and Surgery	Identity (both positioning and self-authoring) through individual agency is used to explain how women enter and perform in the Figured World of surgery, which conflicts sometimes with the Figured Worlds of parenting, working against the constraints of masculine expectations, and against other dominant discourses.	Identity and agency. Dominant discourses, structural constraints, multiple Figured Worlds. Not much mention of artefacts, which could have been used.	UK	19
Hoffman S.J., Tierney J.D., Robertson C.L. Counter-narratives of coping and becoming: Karen refugee women's inside/outside figured worlds 2017	Political Immigration	Refugee women's identity development both within and outside refugee camps (which constrain their agency) and their creation of a third space through agency which is a hybrid of their traditional identities as homemakers and nurturers, with their current role as financial providers. Here they can therefore enact their agency and empower their children and refigure their own identities	Identity and agency, intersecting Figured Worlds. The author refers to a third space constructed to achieve moments of stillness, to usher transformation and for the negotiation of cultural difference. I think this is really an improvisation	Thailand	18

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Hungerford-Kresser H., Vetter A. Positioning and the Discourses of Urban Education: A Latino Student's University Experience 2012	Education Undergraduate education	Identity (positioning) and agency is used to explain how a Latino student navigates the Figured World of college, and struggles against dominant discourses as well as institutional barriers, eventually creating an identity that excludes him from continuing in the Figured World of college	Identity, agency, institutional constraints, dominant discourses	USA	18
Jackson P.A., Seiler G. Identity work in the college science classroom: The cases of two successful latecomers to science 2017	Education Undergraduate education	Identity and agency of non-traditional students in a pre-university science course, as they persist with the course against structural constraints and the challenges faced by them in enacting agency and constructing identities of good science students.	Identity, agency, structural constraints. The participants improvised while enacting their agency, although this was not explored in the paper.	Canada	16
Jackson, Phoebe A.; Seiler, Gale Science identity trajectories of latecomers to science in college 2013	Education Undergraduate education	Identity, agency, improvisation, structural constraints in understanding science students' trajectories and whether they persist in the Figured World of a science course	Identity, agency, improvisation	Canada	17
Jaeger A.J., Haley K.J., Ampaw F.D., Levin J.S. Understanding the career choice for underrepresented minority doctoral students in science and engineering 2013	Education Doctoral education	Identity and agency in Figured Worlds to explain underrepresented doctoral students' career choices in STEM subjects	Description of people's experiences through a Figured Worlds lens, but not the development of various analytical concepts.	USA	18

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Lara, Gilberto P.; Franquiz, Maria E. Latino Bilingual Teachers: Negotiating the Figured World of Masculinity 2015	Teaching Primary school teaching	Male bilingual teachers' identity negotiations in elementary schools, and their positioning as well as agency in accepting or rejecting this positioning. Use of artefacts in their interactions with the pupils	Identity, agency, artefacts, positioning	USA	16
Lawrence, Ann M (Dis)Identifying as Writers, Scholars, and Researchers: Former Schoolteachers' Professional Identity Work during Their Teacher-Education Doctoral Studies 2017	Education Teacher doctoral education	The author explores the identity negotiation process of doctoral student teachers in the Figured World of writing groups and doctoral college	Identity, multiple Figured Worlds, agency	USA	16
Leander, Kevin M Locating Latanya: The situated production of identity artifacts in classroom interaction 2002	Education Secondary education	The Figured World of an English language classroom is described where a pupil was positioned by other pupils and her negotiation of that positioning through artefacts used to position that pupil, *e.g.*, aggressive characteristics, are explored.	Identity, positioning, artefacts as a tool of identity	USA	17
Lynch, Anissa Wicktor Identity and literacy practices in a bilingual classroom: An exploration of leveraging community cultural wealth 2018	Education Primary education	A pupil's identity as an expert language learner is developed through the pupil's agency, history in other Figured Worlds and teachers' appropriation of this history as artefacts.	Identity, agency, artefacts, history in person. I think the teacher's actions could be interpreted as an improvisation, but there was no exploration of that fact.	USA	17

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Maricela Oliva, Mariela A Rodríguez, Iliana Alanís, Patricia D Quijada Cerecer At Home in the Academy: Latina Faculty Counterstories and Resistances 2013	Professional careers Academic professionals	In the Figured World of academic professionals, women of Latino origin discuss their identities and their negotiations of the various positions conferred upon them	Identity. I have inferred that agency is being explored although not explicit	USA	16
Mayes, Eve; Mitra, Dana L.; Serriere, Stephanie C. Figured Worlds of Citizenship: Examining Differences Made in "Making a Difference" in an Elementary School Classroom 2016	Education Primary education	Identity, agency, artefacts, positioning are all well explored in this article. Well written about how salience and engagement with Figured Worlds is elicited, and how Figured Worlds can be constraining as well as allowing possibilities	Identity, agency, artefacts, Figured World, positioning.	USA	16
McConnochie M., Mangual Figueroa A. “Dice que es bajo” (“She says he's low”): Negotiating breaches of learner identity in two Mexican families 2017	Education Primary education and literacy practices	In the Figured World of English literacy, the authors discuss how immigrant parents attempt to develop identities in their children as experts in English during homework activities, at the cost of their own language and culture so that English is privileged over others.	Interpersonal interaction, identity, artefacts	USA	17
Mewes, Julie Sascia; Elliot, Michelle L.; Lee, Kim Cutting through the layers: Alternating perspectives and co-laborative analytic approaches to understanding occupation and its objects 2017	Healthcare Occupational therapy	The authors use Figured Worlds (and two other theoretical perspectives) to explore a single incident of cooking in a mental health institution. Through the Figured World lens the identity and positioning of a single patient through the use of artefacts is explored.	Identity, mainly positioning identity, and artefacts.	Germany	13

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Michael A., Andrade N., Bartlett L. Figuring "success" in a bilingual high school 2007	Education Secondary education immigrant education	The Figured World of a bilingual school, where the identities of immigrant students are developed as successful learners through the use of cultural artefacts as well as positioning by teachers.	Identity, artefacts, positioning.	USA	16
Naraian, Srikala General, Special "and" ... Inclusive: Refiguring Professional Identities in a Collaboratively Taught Classroom 2010	Professional careers Primary teacher professional development	Through a Figured Worlds lens, the author discusses the identity development of a special education teacher, as she navigates from this role to that of a general education teacher and back, through the use of artefacts, occasional improvisation and against power relationships as well as structural constraints	Identity (figurative and positional), agency, improvisation, artefacts, interpersonal interaction, structural constraints-this is one of the few papers that has discussed almost all the analytical aspects of Figured Worlds	USA	18
Nicol Living action research: authoring identities through yaya projects. 2004	Education Postgraduate education	The authors explore the development-positioning and authoring-of their identities through action research, in creating an art project and how they shape their Figured Worlds of this project	Identity, Figured Worlds	Canada	17
Olson R.E. Exploring identity in the 'figured worlds' of cancer care-giving and marriage in Australia 2015	Healthcare Cancer carers	The author explores the positioning of spouses of cancer patients as carers and their negotiation with this positioning, through the intersection with their Figured World of marriage and the presence or absence of reciprocity in this relationship	Identity-positioning and intersecting Figured Worlds.	Australia	16

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Olson, Rebecca E Klupp, Nerida Astell-Burt, Thomas Reimagining health professional socialisation: an interactionist study of interprofessional education 2016	Healthcare professions education Allied health professional education	A Figured World approach theorises how students in the allied health professions develop their professional identity, how they enact agency in being able to change course, their use of artefacts such as uniforms to internalise their professional identity and the professional socialisation that takes place during an interprofessional education course at one university	Identity, agency, artefacts	Australia	15
Pennington, Julie L.; Prater, Kathryn The Veil of Professionalism: An Autoethnographic Critique of White Positional Identities in the Figured Worlds of White Research Performance 2016	Education Researcher development	Two white researchers explore their identity as positioned by the dominant discourses of being white privileged researchers studying how to teach students of colour, and how the researchers take up the subject positions offered to them. The researchers offer suggestions on how to reflect on one's white race while conducting research	Identity, dominant discourses	USA	19
Powell, Sean R. The Self-Authoring of a Music Educator: A Journey Through Figured Worlds 2016	Teaching Primary school teaching	A Figured Worlds lens highlights a music teacher's identity development through use of cultural artefacts and agency as she experiences different worlds of teaching.	Identity, agency, artefacts	USA	16
Quinlan A., Curtin A. Contorting identities: figuring literacy and identity in adolescent worlds 2017	Education Secondary education	The author employs a Figured Worlds lens to explore how adolescent students navigate intersecting Figured Worlds of school literacy and social life outside school in negotiating their identities and salience with these worlds	Identity, artefact, multiple Figured Worlds, salience with Figured Worlds	Ireland	20

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Rahm J., Moore J.C. A case study of long-term engagement and identity-in-practice: Insights into the STEM pathways of four underrepresented youths 2016	WP WP into science	An out-of-school Upward Bound programme is explored through the lens of Figured Worlds, whereby the pupils that enter this programme develop potential identities as science students; these identities act as artefacts for their future identities in the world of HE and work, even when they are not pursuing science courses or careers.	Identity, positioning, artefacts, Figured Worlds, perhaps agency, interpersonal interaction.	USA	13
Roth S., Stuedahl D. 'You Norwegians think we female Muslims are not free': enactment of gendered positional identities during transition stages 2017	Education and gender studies Secondary education, adolescent girls	The study explores the positioning of adolescent girls of ethnic minority groups in Norwegian culture, in intersecting Figured Worlds of school and family life, and their authoring of that positioning.	Identity and agency, multiple Figured Worlds.	Norway	18
Roth, Solveig; Erstad, Ola Positional identities in educational transitions: connecting contemporary and future trajectories among multiethnic girls 2016	Education and gender studies Secondary education, adolescent girls	The study explores the positioning of adolescent girls of ethnic minority groups in Norwegian culture, in intersecting Figured Worlds of school and family life, and their negotiation of that positioning.	Identity, positioning, perhaps agency, intersecting Figured Worlds	Norway	18
Sherry M.B., Messier-Jones L.M., Morales J. Positioning in prospective secondary English teachers' annotations of teaching videos 2018	Education Teacher education	The authors explore how teachers positioned themselves differentially as students and as teachers in the Figured World of teacher education and teaching.	Identity, multiple Figured Worlds	USA	17

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Stornaiuolo, Amy; Whitney, Erin Hope Writing as Worldmaking 2018	Education and literacy studies Secondary education and literacy studies	The world of writing is treated as a Figured World where meaning is made, through the use of resources that come from other Figured Worlds, and individual identities are developed, and the Figured World may be reimagined	Identity, history-in-person, resources, multiple Figured Worlds	USA	16
Stubbing E, Helmich E, Cleland J. Authoring the identity of learner before doctor in the figured world of medical school. 2018	Healthcare professions education Undergraduate medical education	The identities of medical students as they enter the Figured World of medical school, and their evolution as they negotiate their identities along preconceptions of what it means to be a doctor, against tensions of how they are positioned in medical school and their own perception of identity once they are in medical school.	Identity	UK	19
Sulsberger M.J. Gathering, interpreting, and positioning children's narratives in environmental education research 2018	Education Primary education	The author explores how children develop their environmental identities in garden education, through the lens of Figured Worlds-by the amalgamation of their cultural history, other Figured Worlds and the interaction within the social context of the garden lessons	Also uses Gee's approach for tools and stereotypes. Identity, cultural artefacts, multiple Figured Worlds	USA	16
Sydnor, Jackie Negotiating Discourses of Learning to Teach: Stories of the Journey from Student to Teacher 2014	Education Teacher education	The author explores how student teachers negotiate their identities as they navigate the Figured Worlds of their learning environment and that of classroom teaching, as they bring in their preconceptions and artefacts from other Figured Worlds, negotiate and internalise dominant discourses, develop salience with those discourses and Figured Worlds.	Identity, salience, dominant discourses, artefacts in multiple Figured Worlds	USA	16

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
Terosky, Aimee LaPointe; Gonzales, Leslie D. Re-envisioned Contributions: Experiences of Faculty Employed at Institutional Types that Differ from their Original Aspirations 2016	Professional careers Academic professionals	The authors explore the identity reconfiguration of academics who are employed at less prestigious institutions, which differs from their perceptions during graduate study, and also their agency in navigating relations within the field, both within and outside their employing institution.	Identity, agency, multiple Figured Worlds.	USA	17
Tonso, Karen L Student Engineers and Engineer Identity: Campus Engineer Identities as Figured World 2006	Education Undergraduate education	The author explores identity as engineers in the Figured World of an engineering campus-in how people are positioned by the cultural norms of that Figured World and how they perform those identities.	Identity-positioning	USA	16
Urrieta Jr. L., Martin K., Robinson C. "I am in School!": African American Male Youth in a Prison/College Hybrid Figured World 2011	Education Youth education	The identity development of young offenders of African-American origin in prison is explored as they navigate the intersecting Figured Worlds of prison and prison college	Identity-positioning and authoring, artefacts	USA	16
Vågan A. Towards a sociocultural perspective on identity formation in education 2011	Healthcare professions education Undergraduate medical education	The author discusses the identity formation and development of medical students as increasingly competent students and medical practitioners as they acquire the discourses and artefacts of the Figured World of medicine.	Identity, artefacts, positioning, dominant discourses, social practices, Figured Worlds	Norway	11

Author(s) Title Year	Research discipline Subject	How Figured Worlds was used	Analytical concepts used	Geographical location	CASP Score
van Lankveld, T.; Schoonenboom, J.; Kusurkar, R. A.; Volman, M.; Beishuizen, J.; Croiset, G. Integrating the teaching role into one's identity: a qualitative study of beginning undergraduate medical teachers 2017	Health education Undergraduate medical education	The author discusses the positioning of medical teachers in the intersecting Figured Worlds of teaching and clinical practice and teaching and research, and their negotiation of this positioning as well as their agency.	Identity, agency, multiple Figured Worlds	Netherlands	19

Appendix 4: Ethics approval

[redacted]

[redacted]

c/o Dr Della Freeth
Room 315 – Garrod Building
Turner Street
Whitechapel
London E1 2AD

14th February 2013

To Whom It May Concern:

Re: [redacted] REC2013/04 – Evaluating [redacted] (aiming to widen participation in dentistry): Examining Stakeholders' Perspectives.

The above study was approved by [redacted] Research Ethics Committee (Review Panel A) on the 13th February.

This approval is valid for a period of two years, (if the study is not started before this date then the applicant will have to reapply to the Committee).

Yours faithfully

[redacted] REC Chair.

[redacted]

Appendix 5: Information leaflets and consent forms: school staff, Project Core Team, HEI students

---

Research study [Evaluating [Access to Dentistry]: Examining Stakeholders' Perspectives]: information for participants

I would like to invite you to be part of this research project. It is up to you to decide if you want to be involved. If you choose not to take part, there are no disadvantages and you will hear no more about it.

Please read the following information carefully before you decide to take part; this will tell you why the research is being done and what you will be asked to do if you take part. Please ask if there is anything that is not clear or if you would like more information.

If you decide to take part you will be asked to sign the attached form to say that you agree.

You are still free to withdraw at any time and you don't have to give a reason.

About myself:

My name is Reshma Agrawal. I am a part-time specialist registrar in Oral Pathology employed by [name of employer]. I am also a part-time PhD student at [name of HEI]. My PhD study will focus on the new Widening Participation initiative by the [dental school at the HEI], called [Access to Dentistry]. The purpose of this study will be to learn from the experiences and views of [A2D] stakeholders and inform subsequent thinking about widening participation. The study has been approved by the [HEI] Research Ethics Committee. The study supervisors are Prof Della Freeth [email] and Prof Kim Piper [email].

The research study will follow [A2D] between 2013 and 2016. During this period I will collect documents and resources developed for the project and conduct short, semi-structured interviews (~30 min) with some purposively selected stakeholders. I anticipate that the interviews will occur during the spring or summer terms of 2013, 2014, 2015 and 2016, although the timing will need to be aligned with the still evolving timetable of [A2D]. I may ask to interview you each year, following key activities in [A2D]. On each occasion, I will ask for your consent. It is up to you whether you participate in an interview every year or only some years. At the end of the study, I will write my report (the PhD thesis). During and after the study, I will prepare short reports for [A2D] stakeholders and for academic meetings. I also hope to publish academic papers. Every effort will be made to preserve your anonymity.

What you can do to help/What next?:

Participation is entirely voluntary and will have no implications, whatsoever, upon your involvement in [A2D]. If you would like to participate, I am happy to answer any questions before asking you to sign a consent form to participate in a short, audio-recorded interview on [HEI] or [school] premises or by telephone [for adult participants].

What about the interview?:

Interviews will last approximately 30 minutes. I will ask you some questions to understand your views on [A2D]. During interviews, I may make notes, and I will record our conversation. Please be assured, that all of our conversations and my notes will be confidential and kept safely in compliance with university regulations. Although I may use short excerpts from our conversation in my thesis and other publications, I will do my utmost to conceal your identity in all publications.

My data collection is expected to end in 2016. At this point, however, the widening participation initiative will not have reached completion, and all activities will continue as planned by the Widening Participation team at [the HEI].

My contact details:

If you have any queries please feel free to contact me via email: [email] or via telephone on: [telephone number].

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form

Consent Form

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study: Evaluating [A2D]: Examining Stakeholders' Perspectives

[HEI] Research Ethics Committee Ref: [reference number]

Thank you for considering taking part in this research. The person organizing the research must explain the project to you before you agree to take part.

If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

- *I understand that if I decide at any other time during the research that I no longer wish to participate in this project, I can notify the researchers involved and be withdrawn from it immediately.*
- *I consent to the processing of my personal information for the purposes of this research study. I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.*

Participant's Statement:

I _____ agree that the research project named above has been explained to me to my satisfaction and I agree to take part in the study. I have read both the notes written above and the Information Sheet about the project, and understand what the research study involves.

Signed:Date:

Investigator's Statement:

I _____ confirm that I have carefully explained the nature, demands and any foreseeable risks (where applicable) of the proposed research to the volunteer

Signed:Date:

1 copy for participant, 1 copy for Reshma

Appendix 6: Information leaflets and consent forms: pupils and parents

Information Sheet for Parent/Guardian

Research study (Evaluating [A2D]): information for participants

I would like to invite your child/ward to be part of this research project. It is up to you and your child/ward to decide if he/she wants to be involved. There are no disadvantages to not taking part and you and your child/ward will hear no more about it.

I have enclosed information about the PhD study, which has been supplied to pupils participating in [A2D]. Please read the enclosed information for pupils and the following information for parents/guardians carefully and discuss this with your child/ward; this will tell you why the research is being done and what your child/ward will be asked to do if he/she takes part. Please ask if there is anything that is not clear or if you would like more information.

If your child/ward would like to take part you will both be asked to sign the attached consent form.

Your child/ward is still free to withdraw at any time without having to give a reason.

Please keep this information about the study in case you want to refer to it later.

About myself:

My name is Reshma Agrawal. I am a qualified dentist and work part-time in the NHS. I am also a part-time PhD student based at [name of HEI]. I am writing to you because your child/ward has been invited to participate in a project called [A2D], which is a new widening participation initiative by the [dental school at HEI]. Pupils involved in [A2D] will receive invitations to participate in the PhD study. Pupils who participate in in the PhD study will sign a consent form. Pupils under the age of 17 will also need a consent

form signed by a parent or guardian, which is why I am writing to you. The research is supervised by Prof. Della Freeth and Prof. Kim Piper, who work at [the HEI].

About the research:

My research project is based on the new Widening Participation initiative by the [dental school at HEI], called [A2D]. Widening Participation is a term used to describe what schools, universities and government do to help pupils from all walks of life get into university to study a course that they like.

Little is known about how programmes to help young people get into dentistry affect them and their families, whether they work well, and what the people involved actually think of them. The purpose of this study will be to understand what the people involved in [A2D] think about the project and dentistry as a career.

The study will last for several years, from 2013 to 2016. I may ask to interview your child/ward each year, following key activities in [A2D]. I anticipate that the interviews will occur during the spring or summer terms of 2013, 2014, 2015 and 2016, although the timing will need to be aligned with the still evolving timetable of [A2D]. On each occasion, I will ask for your child/ward's consent (and yours, if he/she is under the age of 17 years). It is up to your child/ward whether he/she participates in an interview every year or only some years, and this is fine. At the end of the study, I will write my report (the PhD thesis). During and after the study, I will prepare short reports for [A2D] stakeholders and for academic meetings. I also hope to publish academic papers. Every effort will be made to preserve your child/ward's anonymity.

The [HEI] Research Ethics Committee works to make sure that a project such as mine is safe and appropriate for people to take part in. This committee has approved my study.

What you can do to help/What next?:

It is up to you and your child/ward to decide whether to participate.

Your child/ward does not have to agree to an interview if he/she does not want to, and this decision will have no impact on the opportunities he/she is offered through [A2D].

If your child/ward would like to participate, I am happy to answer any questions before asking you and your child/ward to sign a consent form.

What about the interview?:

Interviews will last up to 30 minutes. I will ask your child/ward some questions to understand his or her views on [A2D]. During interviews, I may make notes, and I will record our conversation. Please be assured, that all of our conversations and my notes will be confidential and kept safely in compliance with university regulations. Although I may use short excerpts from interviews in my report and other publications, I will make every effort to conceal the identity of your child/ward.

My data collection is expected to end in 2016. At this point, however, the widening participation initiative would not have reached completion, and all activities will continue as planned by the [A2D] team at [the HEI].

My contact details:

If you have any queries please feel free to contact me via email: [email] or via telephone on: [telephone]

Information Sheet for Pupil

Research study (Evaluating [A2D]: Examining Stakeholders' Perspectives): information for participants

I would like to invite you to be part of this research project. It is up to you to decide if you want to be involved. If you choose not to take part, there are no disadvantages, and you will hear no more about it.

I have enclosed information about the PhD study for you and your parent/guardian. Please read the following information carefully and discuss this with your parent/guardian; this will tell you why the research is being done and what you will be asked to do if you take part. Please ask if there is anything that is not clear or if you would like more information.

If you would like to take part you will be asked to sign the attached consent form. If you are under the age of 17 years, your parent/guardian will also be asked to sign a consent form.

You are still free to withdraw at any time and you don't have to give a reason.

Please keep this information about the study in case you want to refer to it later.

About myself:

My name is Reshma Agrawal. I am a qualified dentist and work part-time in the NHS. I am also a part-time PhD student based at [name of HEI]. I am writing to you because you have been invited to participate in a project called [A2D], which is a new widening participation initiative by the [dental school at the HEI]. Widening participation is a term used to describe what schools, universities and the government do to help pupils from all walks of life get into university to study a course that they like.

About the research:

Pupils involved in [A2D] will receive invitations to participate in the PhD study. Pupils who participate in in the PhD study will sign a consent form. The research is supervised by Prof. Della Freeth and Prof. Kim Piper, who work at [the HEI].

Little is known about how programmes to help young people get into dentistry affect them and their families, whether they work well, and what the people involved actually think of them. The purpose of this study will be to understand what the different people involved in [A2D] think about it.

The study will last for several years, from 2013 to 2016. I may ask to interview you each year, following key activities in [A2D]. I anticipate that the interviews will occur during the spring or summer terms of 2013, 2014, 2015 and 2016, although the timing will need to be aligned with the still evolving timetable of [A2D]. On each occasion, I will ask for your consent (and that of your parent/guardian, if you are under the age of 17 years). It is up to you whether you participate in an interview every year or only some years, and this is fine. At the end of the study, I will write my report (the PhD thesis). During and after the study, I will prepare short reports for [A2D] stakeholders and for academic meetings. I also hope to publish academic papers. Every effort will be made to preserve your anonymity.

The [HEI] Research Ethics Committee works to make sure that a project such as mine is safe and appropriate for people to take part in. This committee has approved my study.

What you can do to help/What next?:

It is up to you to decide to participate.

You do not have to agree to an interview if you do not want to, and this decision will have no impact on the opportunities you are offered through [A2D].

If you would like to participate, I am happy to answer any questions before asking you (and your parent/guardian, if you are under the age of 17 years) to sign a consent form.

What about the interview?:

Interviews will last up to 30 minutes. I will ask you some questions to understand your views on [A2D]. During interviews I may make notes and I will record our conversation. Please be assured, that all of our conversations and my notes will be confidential and kept safely in compliance with university regulations. Although I may use short excerpts from our conversations in my report and other publications, I will make every effort to conceal all participants' identities.

My data collection is expected to end in 2016. At this point, however, the widening participation initiative would not have reached completion, and all activities will continue as planned by the [A2D] team.

My contact details:

If you have any queries please feel free to contact me via email: [email] or via telephone on: [telephone].

Consent Form

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study: Evaluating [A2D]: Examining Stakeholders' Perspectives

[HEI] Research Ethics Committee Ref: [reference number]

Thank you for considering taking part in this research. The person organizing the research must explain the project to you before you agree to take part.

If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

- *I understand that if I decide at any other time during the research that I no longer wish to participate in this project, I can notify the researchers involved and be withdrawn from it immediately.*

- *I consent to the processing of my personal information for the purposes of this research study. I understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.*

Participant's Statement:

I _____ agree that the research project named above has been explained to me to my satisfaction and I agree to take part in the study. I have read both the notes written above and the Information Sheet about the project, and understand what the research study involves.

Signed:Date:

Parent/Guardian's Statement:

I _____ agree that the research project named above has been explained to me to my satisfaction and I agree to let my child/ward take part in the study. I have read both the notes written above and the Information Sheet about the project, and understand what the research study involves.

Signed: Date:

Investigator's Statement:

I _____ confirm that I have carefully explained the nature, demands and any foreseeable risks (where applicable) of the proposed research to the volunteer

Signed: Date:

1 copy for pupil, 1 copy for parent/guardian, 1 copy for Reshma

Appendix 7: Topic guides

Adapted from Legard *et al* (2003) and Finch and Lewis (2003)

Topic guide for school pupils

Stage 1: Introduction

A. About myself
B. About the research
C. Reiterate consent and confidentiality – I will do my best to keep all our conversations confidential. The only time I am not allowed to do this is if I truly believe that you or someone else might get seriously hurt. If that does happen, I will have to stop the interview to talk about what needs to be done next. But that is very unusual. Normally, I don't mind what you say, and I won't tell other people about it.
D. I will ask you a few questions. There are no right or wrong answers. My research is all about understanding the views, experiences and perceptions of those involved, in some way or another, in Access to Dentistry (A2D). So I want to know what you think, how you have been involved and what you hope to get out of this. I don't mind whether you are really interested in dentistry or not really that interested at all; just tell me what you think and I won't tell any of the other people involved in A2D about your particular views. You can say as little or as much as you want to, and I will make every effort to conceal your identity when I write about or talk about the research I am doing into people's experiences of A2D.

Stage 2: Beginning the interview

A. Factual data
    i. Name
    ii. Age
    iii. School
    iv. Year

Stage 3: Main body of the interview

A. Did you attend the talk?
    i. If yes, what did you think about it? (and follow up prompts such as…)
        (1) …go on
        (2) …so you enjoyed it, what about…

   ii. If no, okay, what do you think about studying at university? (with follow-up prompts…)
      (1) …I see, what sort of course?
      (2) …tell me more about…

B. What about the workshops
C. Can you tell me something about some of the things you have been doing with your mentor(s) so far? (with follow-up prompts…)
   i. … go on
   ii. … tell me some more
   iii. … good, what about …
   iv. … I'm glad you enjoyed that, what would you like to tell me about other things …
D. Can you tell me how A2D has affected you so far (for follow-up interviews)
   i. What sort of challenges you have faced?
   ii. How did you overcome them?
   iii. How has this affected you and the way you think about studying at university?
E. What do you hope for future mentoring or workshops

Stage 4: Ending the interview

A. Thank the participant
B. Reinforce anonymity
C. Permission to contact for further interviews
D. My own contact details for any more information

Topic Guide for WP Staff at HEI and at participating schools

Stage 1: Introduction

A. About myself
B. About the research
C. Reiterate consent
D. I will ask you a few questions. There are no right or wrong answers. My research is all about understanding the views, experiences and perceptions of those involved, in some way or another, in A2D. So I want to know what you think, how you have been involved and what you hope to get out of this. You can say as little or as much as you want to, and I will make every effort to conceal your identity when I write about or talk about the research I am doing into people's experiences of A2D.

Stage 2: Beginning the interview

A. Factual data
    i. Name
    ii. Role in Access to Dentistry
    iii. Involvement in any other WP initiative

Stage 3: Main body of the interview

A. Return to A2D (if there is a need for further narrative)
    i. How did you come to be involved with A2D?
    ii. What do you think about the way A2D is developing so far?
    iii. What did you think about the talk by [Project Core Team member] to the year 8/9 pupils?
    iv. What do you think about the way A2D has evolved since the beginning (for follow-up interviews)
    v. What are your hopes for A2D in the near future?

Stage 4: Ending the interview

A. Thank the participant
B. Reinforce anonymity and confidentiality
C. Permission to contact for further interviews
D. My own contact details for any more information

Topic Guide for Dental Students (Focus groups)

Stage 1: Introduction, scene setting, ground rules

A. About myself
B. About the research
C. Reiterate consent
D. I would like to hear your views on Access to Dentistry (A2D) during this discussion. There are no right or wrong answers. Please don't wait to be invited to speak, although it makes transcription hard if you speak over one another so one at a time would be better. Everyone's views in this room are important, whether you agree or disagree with your fellow participants. My research is all about understanding the views, experiences and perceptions of those involved, in some way or another, in A2D. I don't mind what you think about widening participation or A2D; just tell me what you think and I won't tell any of the other people involved in A2D about your particular views. I am sure all of you will appreciate it if you treat all discussions in this room as confidential too, and not reveal these discussions outside this session. The discussion will be audio-recorded so that I can have a full account of everything that is said today. You can say as little or as much as you want to, and I will make every effort to conceal your identity when I write about or talk about the research I am doing into people's experiences of A2D.

Stage 2: Beginning the session

A. Factual data – individual participant introduction
    i. Name
    ii. Year group

Stage 3: Discussion

A. Opening topics
    So far in A2D there have been four components in which you might have been involved – a talk from [Project Core Team] introducing A2D to students; talks to year 8/9 pupils in various schools, preparation for mentoring workshops and, finally, dental students getting involved in mentoring school pupils. Would it be convenient to talk briefly about each of these in turn?
    i. Does anyone remember the introductory talk? (with prompts and encouragement to move to next topic…)
B. Main discussion

i. That's really useful to hear, what about talks to year 8/9 pupils in local schools?
   (1) Has anyone attended any of these?
   (2) What did you think?
ii. That's interesting; can you talk about the mentoring?
   (1) What were the workshops like?
   (2) Can anyone talk about mentoring school pupils?

C. Final topic
   i. Can you talk about how you think A2D should develop in the future?

Stage 4: Ending the session

D. Thank the participants
E. Reinforce anonymity and confidentiality
F. Permission to contact for further discussions
G. My own contact details for any more information

Topic Guide for Dental Students (individual interviews)

Stage 1: Introduction

A. About myself
B. About the research
C. Reiterate consent
D. I will ask you a few questions. There are no right or wrong answers. My research is all about understanding the views, experiences and perceptions of those involved, in some way or another, in Access to Dentistry (A2D). So I want to know what you think, how you have been involved and what you hope to get out of this. You can say as little or as much as you want to, and I will make every effort to conceal your identity when I write about or talk about the research I am doing into people's experiences of A2D.

Stage 2: Beginning the interview

A. Factual data
    i. Name
    ii. Year

Stage 3: Main body of the interview

So far in A2D there have been four components in which you might have been involved – a talk from [Project Core Team] introducing A2D to students; talks to year 8/9 pupils in various schools, preparation for mentoring workshops and, finally, dental students getting involved in mentoring school pupils. Would it be convenient to talk briefly about each of these in turn?

A. Did you attend the introductory talk?
    iii. What did you think of it?
B. Did you attend talks to the year 8/9 pupils in local schools?
    i. What did you think?
C. Can you tell me something about the mentoring?
    i. What were the workshops like?
    ii. How was the mentoring experience?
    iii. (For follow-up interviews) How had the experience changed this year?
D. How do you think A2D should develop in the future?

Stage 4: Ending the interview

A. Thank the participant

B. Reinforce anonymity and confidentiality
C. Permission to contact for further interviews
D. My own contact details for any more information

Appendix 8: Sample list of codes used in data analysis

Codes (referred to as nodes in Nvivo)	**Sub codes (referred to as 'child' nodes in NVivo)**
Agency	
Artefact	Notional artefact
	Tangible artefact
Aspiration	
Barriers to HE participation	Constraints of finances
	Capital
	Distance to HE
Campus visits	Workshop activities
Capital	Social capital
	Cultural capital
	Other capital
Constraints	Constraints of exams
	Constraints of staff resources
	Constraints of finance
	Constraints of access
Contextualised admissions	
Dominant discourses	
Engagement	
Establishing relationships with participants	
Evaluation of WP activities	
Evolution of Figured Worlds	
Field	
Financial considerations	Constraints of finance
	Future financial security
Gatekeeper	
Hot knowledge	

Codes (referred to as nodes in Nvivo)	**Sub codes (referred to as 'child' nodes in NVivo)**
Identity	History in person
	Subject positioning
	Authoring identity
Improvisation	
Interpersonal interaction	Establishing relationships with participants
Introductory talks	
Organisational issues	Engagement
	Evaluation of WP activities
Opportunity	
Other Figured Worlds	Figured World of home
	Figured World of school
	Figured World of HE
	Figured World of clinical dentistry
	Figured World of research
Peer mentoring	Peer mentoring training
	Peer mentoring aims
	Peer mentoring guidance
	Peer mentoring structure
	Peer mentoring evaluation
Personal history	
Personal values	
Persuasion	
Pupil enthusiasm	
Researcher insider status	
Retention at HEI	
Salience with Figured Worlds	
School visits	Workshop activities
Targeting	Guidance
WP background	Parental education

Appendix 9: Sample list of categories derived from codes

- Constraints in the Figured World of school causing lack of engagement
- Hot knowledge as artefacts
- Identity in one Figured World influencing agency in another
- Identity in school visits through artefacts from other Figured Worlds amongst dental students
- Improvisation by dental students in interpersonal interaction with pupils
- Improvisation in targeting by HEI staff
- Improvisation in targeting by school staff
- Improvisation in targeting by school staff through personal history
- Introductory talks as hot knowledge
- Lack of school engagement because of changing gatekeeper staff
- Means of contacting A2D as artefact through interpersonal interaction
- Salience for pupils during campus visits
- Salience for pupils during school visits
- Subject positioning through the artefact of SLA
- Subject positions through interpersonal interaction
- Targeting through artefacts
- Targeting through history-in-person
- Targeting through interpersonal interaction
- Targeting through judgement
- Targeting through personal values
- Targeting through persuasion
- Targeting through pupil enthusiasm
- Targeting through subject positions

Appendix 10: Annotation of quotations, field notes and participant codes

Int	Individual interview
FG	Focus Group
FN	Field Notes
Yr[year in number]	Chronological year of the WP initiative
PCT[participant code number]	Project Core Team member
DS[participant code number]	Dental Student
SS[participant code number]	School Staff member
SP[participant code number]	School Pupil
C[code number]	Cohort in WP initiative (for dental students and school pupils)
S[code number]	School
Year[number]	Academic year of dental student or pupil at time of interview

Appendix 11: Transcription symbols

[…]	Section of quotes edited out by researcher
[text in square brackets]	Text added by researcher to clarify quote
…	Pause in speech
(text in round brackets)	Researcher observations during interviews or non-verbal cues